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RELATIONSHIPS BETWEEN TEACHER ATTITUDES AND  
SELF-RATINGS OF SUCCESS IN TEACHING

by



WILFRED JOHN GREEN

A THESIS

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THE UNIVERSITY OF ALBERTA  
FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "Relationships Between Teacher Attitudes and Self-Ratings of Success in Teaching," submitted by Wilfred John Green in partial fulfilment of the requirements for the degree of Master of Education.

Date .

July 30, 1971 . . . . .







## ABSTRACT

The study sought to identify the factors which Alberta teachers perceived as being important to the teaching act in various subject-matter fields and grades. The study also investigated the relationship between the attitudes which prospective teachers possess at the completion of a four-year preparation program and their subsequent success as teachers. The third problem of the study was to determine what influence biographic variables have on teacher attitudes and teacher success.

Data on teacher attitudes had been collected in 1964-65 and 1967-68 by means of the Education Student Attitude Inventory, which included ten scales: Thinking Introversion, a measure of interest in reflective thought and abstract ideas; Theoretical Orientation, a measure of interest in scientific activities and methods; Estheticism, a measure of preference for varied artistic matters and activities; Social Introversion, a measure of interest in relating to other people; Education Profession Aspiration, five measures of level of aspiration within the field of education; and Professional Attitude, a measure of agreement with policy of the teacher organization. The teacher success data were gathered in 1971 by means of the Survey of Contributions to Teaching, sent to 288 teachers in Alberta. The final sample used in the analysis consisted of the 203 teachers for whom attitude data and teacher success data were available.

Analysis of the teacher success data revealed that teachers regarded process criteria to be the most important factors in their





self-ratings of teaching success. Respondent self-ratings were used to calculate presage, process, and product ratios. Overall self-ratings were highest on presage criteria, and lowest on product criteria.

When the Overall Success, Presage, Product and Process ratios were compared to teacher attitude scores, several significant correlations ranging from .15 to .25 were obtained. Thinking Introversion correlated positively with all four teacher success ratios; Social Introversion correlated negatively with the Presage ratio; Theoretical Orientation correlated positively with the Overall Success and Presage ratios; and the aspiration scores on the Certainty of Attainment scale correlated positively with the Overall Success and Presage ratios.

Grouping data according to personal and professional variables resulted in a number of additional findings. Sex, age, route, and amount of university education were believed to be possible sources of influence on teacher attitudes and self-ratings of teaching success. Year of attendance at university, university average, division of main teaching responsibility, type of teaching position held, main subject area of assignment, and date when the questionnaire was returned, were not related to teacher attitude and teacher success scores.





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## Chapter 1

### STATEMENT OF THE PROBLEM AND ITS SIGNIFICANCE

#### I. INTRODUCTION

The concept of teacher effectiveness is of such major importance that researchers have expended some fifty years in trying to determine the characteristics of an effective teacher. In studying teacher effectiveness, researchers have examined teacher personality and personal and professional characteristics, teaching methods, pupil growth, and classroom interaction. But, according to Saadeh (1970, p. 73) "the findings have been insignificant (often contradictory), and few, if any, generalizations have been established."

One major problem appears to prevent researchers from obtaining significant results; Selakovich (1970, p. 225) identifies this:

If successful teaching could be reduced to a list of competencies which would be acceptable in all situations, evaluation of teaching might be a simple matter. Unfortunately this is not the case.

What seems to be required is a major redesign of research on teacher effectiveness. Corman (1967, p. 10) proposes that "we break off our attempts to find and impose consensus for teacher behavior." Educators should replace this notion of trying to define the effective or competent teacher by a consideration of each and every teacher as an unique individual. An assumption underlies this proposition, namely that every teacher makes some contributions to teaching which reflect his own strengths as an individual, and which may be unique to him. If





one takes the position that the answer to teacher success lies within the individual teacher, then a related issue becomes one of designing a study to measure self-concept, or the "internal organization of the individual's perception about himself" (Parker, 1966, p. 691).

## II. STATEMENT OF THE PROBLEMS

The present study was concerned with three problems:

1. What factors do Alberta teachers perceive as being important to the teaching act in various subject-matter fields and grades?
2. What is the relationship between the attitudes prospective teachers possess at the completion of a four-year preparation program and their subsequent success as teachers?
3. What influence do biographic variables have on the relationship between teacher attitudes and teacher success?

## III. IMPORTANCE OF THE STUDY

Byrne (1962) points out that those involved in research in the area of teacher effectiveness refer hopefully to each new study as a possible breakthrough. The present study assumed that some worthwhile findings might result if relationships were found between teacher attitudes and teacher success.

Finding relationships between teacher attitudes and teacher success could be of significance to teacher education institutions, local school jurisdictions, and to the individual teacher himself. Being able to accurately predict teaching success from attitudes could serve





a dual purpose for teacher education institutions: first, such information could be an aid in determining which individuals should be accepted into a teacher preparation program. Second, such information could prove useful in suggesting ways that existing content in teacher education programs might be modified in order to make the preparation program more effective (Byrne, 1962).

School boards are interested in attaining as close a match as possible between the individual teacher and the classroom in which he will be teaching. Findings on the relationship between teacher attitudes and teacher success might assist school boards in their staffing efforts (Chaffee and Wagner, 1970).

Teachers could benefit from a self-report questionnaire that could give them some indication of why they are successful; it is anticipated that teachers who were aware of their strengths and weaknesses might be more apt to undertake improvements in their instructional practices.

#### IV. DEFINITION OF TERMS USED

##### Self-Report

Self-reports were used as a measure of inferred self-concept of teacher attitudes and teacher success. The definition of self-report used in the present study is one given by Parker (1966, p. 691). Parker defines self-report as "a behavior representing what the individual is willing and able to say about himself when he is asked to declare his position."



## Attitude

The concept attitude was defined as ". . .the sum total of a man's inclinations and feelings, prejudice or bias, preconceived notions, ideas, fears, threats and convictions about any specific topic" (Thurstone, 1959, p. 216). Kerlinger (1963, p. 5), gives a more concise definition, and says that "in short, an attitude is a set, a readiness, a predisposition to behave in certain ways toward things in the environment." The present study was delimited to the attitudes measured by six scales in the Education Student Attitude Inventory. Four of these were taken from the Omnibus Personality Inventory and are described in the Research Manual (Omnibus Personality Inventory--Research Manual, 1962, pp. 4-6) as follows:

Thinking Introversion (TI) (60 items): Persons scoring high on this measure are characterized by a liking for reflective thought, particularly of an abstract nature. They express interests in a variety of areas, such as literature, art, and philosophy. Their thinking tends to be less dominated by objective conditions and generally accepted ideas than that of thinking extroverts (low scorers). Extroverts show a preference for overt action and tend to evaluate ideas on the basis of their practical, immediate application.

Theoretical Orientation (TO) (32 items): This scale measures interest in science and in scientific activities, including a preference for using the scientific method in thinking. High scorers are generally logical, rational, and critical in their approach to problems.

Estheticism (ES) (24 items): The high scorers endorse statements indicating diverse interests in artistic matters and activities. The content of the statements in this scale extends beyond painting, sculpture, and music and includes interests in literature and dramatics.

. . . . .

Social Introversion (SI) (54 items): The high scorers withdraw from social contacts and responsibilities. They display little interest in people or in being with them. The social extroverts (low scorers), on the other hand, seek social contacts and gain satisfaction from them.





The fifth scale, the Education Profession Aspiration Scale, is a measure of a person's level of aspiration within the education profession. The sixth scale, Professional Attitude, is a measure of the degree of the respondent's agreement with policies of a teachers' organization.

### Teacher Success

In this study teacher success was operationally defined as a self-identification of behaviors which teachers perceived as being important to the teaching act in various subject-matter fields and grades. The Survey of Contributions to Teaching was taken to be an identification of the specific behaviors that contribute to an individual teacher's success.

## V. ASSUMPTIONS

1. It was assumed that participating teachers possessed the knowledge and insight necessary to accurately complete the Education Student Attitude Inventory.

2. It was assumed that the TI, TO, Es and SI scales of the Omnibus Personality Inventory possessed a degree of reliability and validity suitable to an Alberta study.

3. It was assumed that every teacher is successful to the degree that he makes some contributions to teaching which reflect his own strengths as an individual.

4. It was assumed that participating teachers possess the knowledge and insight necessary to accurately complete the Survey of Contributions to Teaching.





## VI. LIMITATIONS

This study was limited to attitude data collected by the Education Student Attitude Inventory. Furthermore, the measurement of teacher success was limited to self-report data collected by the Survey of Contributions to Teaching.

## VII. DELIMITATIONS

1. Only individuals who were enrolled in the fourth year of a Bachelor of Education degree program in 1964 or 1968, or who were enrolled in an after-degree program in 1964, were included in the sample.

2. To be included in the sample, the individuals must have completed the Education Student Attitude Inventory.

3. These individuals must have been actively involved in the field of education in Alberta in 1971.



## Chapter 2

### REVIEW OF THE LITERATURE AND RESEARCH

#### I. INTRODUCTION

A review of all literature pertaining to teacher competence would be a formidable task. Burgess (1970, p. 6) focuses on the difficulties involved when he says, "not only is the literature on teacher competence overwhelming, but even bibliographies on the subject are becoming unmanageable."

Therefore, a decision has been made to delimit the number and scope of research included in this review. A major emphasis will be accorded to research findings, and only studies and articles that have relevance to the present study will be included in the present review.

#### II. ATTITUDE MEASUREMENT

A study designed by Ratsoy (1965) to investigate attitude differences among education students at various stages of a teacher education program, is of particular significance to the present study since some of the information which he collected on University of Alberta students was utilized in the present study. To obtain the data for his study, Ratsoy administered an Education Student Attitude Inventory to all students enrolled in the four undergraduate years of the University of Alberta teacher preparation program. The students responded to a battery that included: four Omnibus Personality scales, namely,





Thinking Introversion, Theoretical Orientation, Estheticism, and Social Introversion; an Education Profession Aspiration Scale; an Education Profession Attitude Questionnaire; and a General Information Questionnaire. Ratsoy concluded that the longer the time an individual spent in the teacher preparation program the greater was his orientation in the direction of experienced teacher attitudes.

Ratsoy extended this study in 1968, by gathering data from virtually all fourth year Faculty of Education students. Many of these individuals had filled out the Education Student Attitude Inventory in 1964-65 when they were beginning their first year of teacher education, and again in the spring of 1968 when they were completing their fourth year.

Weseen (1970) utilized Ratsoy's data of 1964-65 and 1967-68, that is he used the data for 105 students who had proceeded directly through the Bachelor of Education degree at the University of Alberta. The specific purpose of the Weseen analysis was to determine the existence of and amount of change in five personality variables for prospective teachers passing through a four-year teacher preparation program. The analysis revealed that personality, as measured by the paper and pencil test, does change during a teacher preparation program; the group increased significantly in Thinking Introversion or preference for abstract and reflective thought, Theoretical Orientation or preference for scientific methods, and in Professional Attitude or degree of agreement with policies of a teacher's professional organization; the group decreased significantly in Social Introversion or preference for avoiding relationships with other people.



### III. . TEACHING SUCCESS

Probably the most difficult task one faces in designing a study to compare teacher attitudes and teacher success is in deciding how teaching success should be measured. By what method should teaching success be measured? Who should determine if a teacher is successful? What criteria should one use in evaluating teacher effectiveness? These are crucial questions that should be carefully considered by a researcher concerned with teaching success.

#### Observation as an Indicator of Teacher Success

Most studies that have attempted to measure teacher success have used supervisor ratings, but in the last decade research has pointed out some shortcomings of this approach. Ryans (1960) found that two observers simultaneously watching the same teacher tend to see and to respond to quite different events within the total teaching situation. In a later study Lund (1965) also found that principal and supervisor evaluations were different. In the 1969 Encyclopedia of Educational Research, Flanders and Simon point out that supervisor ratings do not correlate with ratings of other supervisors, and add that the ratings seem to be highly biased and subjective.

Kerlinger (1963) indicates why observer ratings do not correlate with each other, saying that the judges' attitudes toward education influence their perceptions of what are desirable teaching traits. Musella (1970) agrees with Kerlinger; he claims that the lack of correspondence between ratings by supervisors, colleagues, and teacher-training specialists is due to the influence of variables related to the





personal characteristics of the raters. Byrne (1962) adds another reason. He asserts that supervisors are inclined to rate teachers in the light of what is currently significant. Individualizing instruction, for example, would likely be very important to a number of the supervisors of today.

In an attempt to find a more objective means of measurement, many researchers diverted their energies to the use of student ratings of teacher effectiveness. Unfortunately, pupil descriptions do not seem to be the answer either. Pupil and supervisor ratings apparently share a serious shortcoming; the rater can report only what the teacher does as he perceives it.

Getzels and Jackson (1963) in the well-known Handbook of Research on Teaching, indicate that there is evidence showing that teachers, students, and supervisors differ on what constitutes teacher effectiveness. Stern, who also wrote a chapter in the above-named book, says, "a number of investigations confirmed lack of correspondence between ratings by supervisors, colleagues, and students" (1963 , p. 421).

Another method has gained in popularity in recent years. Flanders and Simon (1969) indicate that analysis of verbal interaction in the classroom appears to show more promise than other techniques used to date. But, once again there are difficulties; Kleinman (1966, p. 236) points out that there are major problems in using interaction analysis,

Because of the time, expense, and professional skill involved, the reluctance of teachers and administrators, the limited number of visitations feasible, and because the observation of a phenomenon changes it.

Having to specially train evaluators discourages most researchers from



using the interaction analysis technique.

### Self-Evaluation

The answer to effective teaching may lie within the individual himself. Perhaps a self-report, made by the subject himself, may form a basis for inferring what his own competencies as a teacher are.

Research. Many studies have utilized a self-report as a direct measure of self-concept (Wylie, 1961). Strong and Feder (1961, p. 175) claim "a review of literature reveals that at least 15 different instruments have been devised within the past few years to measure some form of an individual's concept of himself." Ryans (1960) made use of a self-report inventory in his Teacher Characteristics Study. Richards (1966) refers to a study conducted by Taylor, Smith, Ghiselli, and Ellison in 1961 in which self-ratings were among the best predictors of on-the-job performance of physical scientists. Richards himself used a self-report in a study he conducted in 1966. More recently Bunyan (1970) utilized self-reports in a study he conducted with elementary student teachers at the University of Oregon.

Limitations. There are a number of limitations to using a self-report. Silver (1965) listed the following as factors which might influence an individual's self-report; clarity of subject's awareness, availability of adequate symbols of expression, willingness of the subject to cooperate, an individual feeling of personal adequacy, an individual feeling of freedom from threat and social expectancy. Mulford's (1970) study added one more limitation to the





list; Mulford found that self-ratings tended to be optimistic as compared to supervisor ratings.

The setting. Not only is each teacher an unique individual, but the setting in which a person is teaching is also unique. Recent studies in Georgia Tech, Indiana University, and the University of Michigan substantiate the point that teaching is contextual (Turner, 1970). In Georgia Tech, for example, the instructor who presented a highly structured course and was calm was seen as good if he drew low anxious, relationship-oriented students, but if he drew high anxious, task-oriented students, he might not be viewed as good or preferable. Likewise, Ryans (1967, p. 51) presents the viewpoint that there are no universally good or poor teachers:

So far as specific characteristics of the teacher are concerned, what is judged "good" teaching by one person, one community or at one time may not be similarly viewed as "good" by another person, another community or at some later time.

A review of research yields the following general conclusion: "No single person is a universally effective teacher. Teachers display competency or its lack in relation to specific teaching situations" (Byrne, 1962, p. 23).

Criteria. Development of criteria is a necessary prerequisite to any assessment. If there are no universally good or poor teachers, then it follows that there is no universal list of criteria on which teachers can rate their teaching success.

According to Byrne (1962), the criteria that are listed in self-ratings inventories should reflect wide consensus. Criteria



recorded in studies done by Moore (1966), Thomas (1969), and Rogers (1970) do meet this stipulation; that is, the criteria do reflect consensus of a large number of individuals in Australia and Alberta. Opinions of Australian Inspectors of Schools were the source of the criteria analyzed by Moore (1966); Thomas replicated Moore's study with Victoria High School Principals to come up with lists of criteria; Rogers carried out basically the same study as Moore and Thomas with Alberta High School Principals. Not only were the criteria almost identical in these three studies, but findings were also similar. Respondents (1) placed similar emphasis on individual criteria utilized in these three studies, (2) deemed process criteria to be most important when teachers were being promoted to another classroom and position, (3) stressed process criteria when teachers were being promoted to an administrative position.

Mitzel (1960) claims that criteria for teacher effectiveness research can be placed into one of three categories: presage, process, and product. McAvoy (1970, p. 10-12) defines these categories as follows:

Presage variables are a measure of those characteristics which a teacher or pupil brings to the classroom; process variables include those behaviors, moves or strategies which are employed by a teacher or pupil in a classroom situation; product variables are measures of instructional outcomes.

Factor analysis revealed that the criteria in Roger's study do exhibit a general tendency to load on the three factors of presage, process, and product.





#### IV. RESEARCH RELATING TEACHER ATTITUDES TO TEACHER SUCCESS

Different teachers have different attitudes, but what relationship is there between attitudes teachers possess and their subsequent success as teachers? This is a question that numerous researchers have tried to answer.

##### Using Observer Ratings

Getzels and Jackson (1963) refer to a number of studies involving use of the Minnesota Teacher Attitude Inventory (MTAI) which are worthy of mention. In 1953 Hellund conducted a study with the purpose of determining whether the MTAI could be used to discriminate between students who go on to become effective teachers and those who do not. Composite ratings by the teacher's supervisor, who in most cases was a principal, were used as measures of teaching effectiveness. These ratings were compared to teacher MTAI scores, but positive findings were few. La Bue conducted a study in 1955 in which he concluded that the MTAI is useful in identifying correlates of teaching success. This conclusion was based on correlations in the order of .25. In studies conducted one year later, Sandgren and Schmidt, and Oelke, used critic teachers' ratings as a base of teacher success, but when they compared the critic teachers' ratings with MTAI scores, they found no significant relationship. They concluded that the MTAI cannot be used to predict possible success in teaching. In 1957, though, Stern and Hardy reported satisfactory predictive relationships, as did Justiz in a recent 1969 study. Justiz (1969) found a relationship between student



teacher attitude, as measured with the MTAI, and pupil achievement.

Results from recent studies that used attitude measures other than the MTAI have been encouraging. Chabassol (1967) designed a study to compare variables which predicted success in male teachers at the elementary and secondary levels. Inventories were used to measure attitudes, and evaluations of cooperating teachers and faculty members to measure teacher success. A relationship between teacher attitudes and teaching success was shown to exist. Gates (1968) also found a relationship between attitudes and success; with regard to attitude, teachers rated effective appeared to have a more positive attitude toward teaching and children than those rated ineffective.

#### Using Self-Ratings

Research comparing teacher self-ratings and teacher attitudes seems to be practically nonexistent. One such study was conducted by Lantz in 1961. In this study, involving elementary student teachers at the University of Minnesota, Lantz found that self-concept variables were unrelated to scores on the Miller Analogies test and the Minnesota Teacher Attitude Inventory. Self-concept scores were related to four scales of the Minnesota Multiphasic Personality Inventory.

The conclusion of Ellena, Stevenson and Webb in 1961 seems to hold true today: there is a small but positive relationship between attitudes and teaching success. Or as Tippen attests, ". . .it has been suggested that a teacher's effectiveness depends at least as much upon his attitudes as upon his length of experience or qualifications" (1966, p. 142).





## V. INFLUENCE OF BIOGRAPHIC VARIABLES ON TEACHER ATTITUDES AND TEACHER SUCCESS

Differences have been shown to exist in teacher attitudes and in teacher success when teachers have been grouped according to the personal variable of sex, and the professional variables of subject matter field of concentration, teaching experience and teaching level.

### Variance in Teacher Attitudes

As mentioned previously, Ratsoy's (1965) study is of special importance to the present study, since some of the information which he collected on University of Alberta students was utilized in the present study. Ratsoy found that there were significant attitude differences between education students when they were classified according to social categories, conditions of personal status, and teaching experience. When students were classified according to sex, males had a higher level of occupational aspiration than females; males were also higher than females on Theoretical Orientation or preference for using the scientific method; females were higher on Estheticism, that is, on interest in painting, sculpture, and music. Classification by subject matter field of concentration provided consistent differences; the mean scores of female elementary majors were lower on interest in science and scientific activity, attitudes expressed on policy of a teachers' organization, and liking for reflective thought and interest in a wide variety of areas. Teaching candidates in the fourth and final year of the preparation program differed significantly from first, second, and third year candidates in attitudes, that is, these individuals had a higher liking



for reflective thought and interest in a wide variety of areas, a higher interest in science and use of the scientific method, and a higher occupational aspiration.

Weseen (1970), who utilized Ratsoy's data, likewise found differences when the data were grouped according to biographic variables. Theoretical Orientation was higher for males and mathematics, or science majors, and Estheticism was higher for females and non-science majors.

The many other researchers who have used teacher attitude measures on prospective and practicing teachers, have likewise found a great variation in attitudes of teachers when respondents were grouped according to biographic variables. Ryans (1960), in an extensive ten-year Teacher Characteristics Study, suggests that attitudes are not identical for elementary and secondary school teachers. Researchers using the Minnesota Teacher Attitude Inventory have also pointed out differences in attitudes among teachers grouped according to sex, teaching level, experience, and nature of subject matter taught.

#### Variance in Self-Evaluations

Researchers have grouped individual self-evaluation data in numerous ways in an attempt to determine if certain factors influence self-reports. Bown (1967) conducted a study in which he found significant relationships when he grouped teachers into elementary and secondary groups; he grouped the 174 female student teachers in his study into an elementary group and a secondary group, applied an analysis of variance to the data, and confirmed beyond a .01 level that the elementary group scored higher on the Children Scale of the Bown





Self Report Inventory, that is, there was a warm helping orientation in elementary school teachers. Elementary teachers also scored higher on total score and this was an indication that elementary teachers perceived themselves more positively than high school teachers.

Is sex a factor in self-evaluations? An analysis of variance applied to data collected from Oregon graduates in elementary education led Lund (1965) to conclude that one sex does not score higher than the other in self-evaluation. Four years later, Yamamoto (1969) also concluded that sex differences were insignificant in self-evaluations. This conclusion was based on self-evaluation data that were gathered from a sample of 66 secondary education students getting ready for student teaching, and from 56 secondary and 52 elementary education students who had already completed student teaching. In another 1969 study it was also concluded that there were no differences between male and female student teachers as far as self-evaluations were concerned (Musella, 1969).

Teaching experience has also been considered to be a possible factor of variance. When Guiler (1970) studied 127 first year vocational agriculture teachers who had graduated from Ohio State University, he found that teachers perceived a change in their teaching abilities during the duration of their first year of teaching. Significant average rating gains were noted in the areas of teaching agricultural mechanics and conducting young and adult farmer programs. Abelson (1967) conducted a similar study with 313 elementary graduates from the City University of New York. Findings in this study were not as definite as those in the Guiler study; Abelson reported that teachers perceived



themselves as gaining in teaching proficiency during their first year of teaching, but the gains recorded were minimal.

## VI. SUMMARY

This chapter was concerned with a survey of relevant literature. First a summary was presented of attitude research done by Ratsoy (1965) and Weseen (1970); Ratsoy found that the longer the time an individual spent in the teacher preparation program, the greater was his orientation in the direction of experienced teacher attitudes; Weseen utilized Ratsoy's data, finding that personality does change during a four-year preparation program.

Measuring teacher success by means of supervisor ratings, colleague ratings and student ratings was discussed next, and it was noted that observer ratings do not correlate with each other. Interaction analysis was suggested as another method of measuring teacher success but this technique likewise has major limitations. A number of the limitations are: (1) interaction analysis is time consuming, (2) there is considerable expense, (3) observers require special training and (4) teachers and administrators are reluctant. A self-report was deemed to be the most suitable method by which to measure teacher success in a study designed to compare teacher attitudes to teacher success.

The next section of the chapter was devoted to a review of research relating attitudes to teacher success. There are small but positive relationships between attitudes and teaching success where either observer ratings or self-ratings are utilized as criteria of





teacher success.

A discussion of the influence of biographic variables on teacher attitudes and teacher success was presented in the latter section of the chapter, where it was noted that the personal variable of sex, and the professional variables of subject matter field of concentration, teaching experience, and teaching level have an influence on teacher attitudes and teacher success.



## Chapter 3

### METHODOLOGY

#### I. INTRODUCTION

Two instruments were utilized in the data collection for the present study, and this chapter is devoted to a discussion of the Education Student Attitude Inventory and the Survey of Contributions to Teaching. The discussion emphasizes the Survey of Contributions to Teaching, since this questionnaire was specially designed for the present study; the chapter includes a detailed statement on the construction and pretesting of the Survey of Contributions to Teaching. Information about the sample, data collection, and method of data analysis are included in the latter sections of this chapter.

#### II. INSTRUMENTS

##### Education Student Attitude Inventory

The instrument used to obtain the attitude data was designed by Ratsoy (1965). This Education Student Attitude Inventory consists of four parts. In Part A students are asked to furnish biographic information regarding their age, sex, marital status, socio-economic status, size of town where grade twelve was completed, cumulative university average, major subject area, and grade level preferred in teaching; Part B consists of 160 true-false items and requests information regarding thinking introversion, theoretical orientation,





social introversion, and estheticism, which are four components of attitude that have been defined previously; Part C consists of a 20 question Education Profession Attitude Questionnaire and requests information regarding professional attitude; Part D is a five-item aspiration scale that gathers information related to an individual's aspirations in the near and more distant future.

A copy of the Education Student Attitude Inventory is included in Appendix C.

### Survey of Contributions to Teaching

The Survey of Contributions to Teaching was constructed to measure perceptions which individual teachers have of their teaching success.

Section One of the questionnaire requests background information on the respondents; the seven questions that comprise this section were designed to collect information on the teacher regarding: position held in the school system at the time the questionnaire was administered, the division in which the teacher's main responsibility lies, number of years of academic and professional preparation, teaching assignment, and amount of time devoted to the field in which he was assigned. The questions for this section were abstracted from a questionnaire used by Ratsoy (1970) to study the Alberta teaching force.

Section Two consists of twenty-nine listed criteria of teacher success. The criteria were extracted from listings of criteria which supervisors claimed they employed in promoting a classroom teacher to another classroom. These studies conducted by Moore (1966), Thomas (1969),



and Rogers (1970). Virtually all of the criteria listed in the Moore, Thomas, and Rogers studies were included in the questionnaire; the level of intelligence of the teacher was the only criterion that was deemed impossible to assess subjectively in a self-report, and was, therefore, not included in the questionnaire. The Self-Report on Factors Contributing to Teaching Success stipulated three limitations: (a) the respondent was asked to check only those criteria which applied to his area of assignment this year, (b) each respondent was asked to rate only those items he had checked as applying to his area of assignment, and (c) each respondent was asked to list and then rate additional factors which contributed to his teaching success.

Parten (1950) reported that marketing studies have shown questionnaires on yellow paper to have the highest percentage returned. Therefore, questionnaires used in this study were printed on yellow paper.

In an attempt to realize the highest possible return, covering letters that accompanied the questionnaires were signed by the researcher's adviser and were printed on University of Alberta letterhead. Using university letterhead has been found to increase returns, as a study by Brunner (1969) revealed.

Postage stamps, affixed by hand, were used on the return envelopes; a recent study (Champion, 1969) points out that response rates are greater when regular postage, rather than imprinted permit indicia, is used.

Appendix A includes copies of letters that accompanied the first mailing and the subsequent two follow-ups; Appendix B includes a copy





of the Survey of Contributions to Teaching Questionnaire.

## II. PRETESTING THE SURVEY OF CONTRIBUTIONS TO TEACHING

Pretesting was included as part of the questionnaire design. Storey (1969) recommends that the first draft of a questionnaire be circulated to colleagues and any other willing persons for their criticisms and comments. The Survey of Contributions to Teaching was subjected to the scrutiny of selected staff members and graduate students in the Department of Educational Administration.

After the questionnaire had been amended in light of the comments offered, then the revised instrument was subjected to a second stage of pretesting, pretesting in the field by means of a pilot study. Principals of two schools in the East Smoky School Division No. 54, and principals of two schools in the County of St. Paul No. 19 agreed to participate in the pilot study; twenty-three teachers from Hillside Junior-Senior High School in Valleyview, twenty-one teachers from Valleyview Elementary School, eleven teachers from Elk Point Elementary School, and thirteen teachers from Ashmont Junior-Senior High School were included in the pilot study.

Questionnaires were not sent individually to the teachers, but instead were sent directly to principals for distribution. Since the Likert type scale was of major concern to the researcher, the following additional instructions were attached to each questionnaire:

The instructions tell you to indicate your contribution only on items that you have checked, but for purposes of this pilot study I am requesting that you RATE EVERY ITEM. All items need to be rated so that an item analysis can be performed.



Of a possible total of sixty-eight questionnaires, thirty-eight or fifty-six per cent were returned. The data from the thirty-six usable questionnaires were submitted to a Chi-Square Goodness of Fit analysis. Table 1 reveals that responses for twenty-eight of twenty-nine items were normally distributed. Item seven, "lesson preparation and planning," was the only item that had a probability of a greater Chi-Square below .05; the probability level of .04 revealed that the responses for item seven were not normally distributed. Fewer than five per cent of the items were not normally distributed, so that it was deemed unnecessary to alter the Likert type scale.

The wording of all items also remained the same. All questions had been used in previous studies, and it was assumed that the face validity of the questions had been established previously. An absence of comments from the pilot group about the phrasing of items in part substantiated this assumption.

Only a few minor changes in size of type were made before the final edition of the Survey of Contributions to Teaching was printed.

### III. DESCRIPTION OF THE SAMPLE

Any teacher who was included in the study sample met the following requirements:

1. The individual proceeded directly through a four-year Bachelor of Education degree at the University of Alberta, or entered the Bachelor of Education program after completing another degree.
2. The individual had been enrolled in his fourth year of the Degree program in 1964-65 or 1967-68, or was in his first year of an



Table 1

Results of a Chi-Square Analysis for Goodness of Fit Applied to  
Pretest Data on Factors Contributing to Teaching Success  
(N = 36)

No.	Criteria <sup>a</sup>	Chi-Square for Goodness of Fit <sup>b</sup>	Probability of a Greater Chi-Square
1.	The energy, force and enthusiasm displayed in teaching	.60	.44
2.	Class control	1.17	.28
3.	Academic qualifications and knowledge of curriculum	.68	.41
4.	Pupil participation in lessons	1.40	.24
5.	The personality of the teacher	2.67	.10
6.	Pupil attitudes of courtesy, industry, and self-reliance	1.98	.37 <sup>c</sup>
7.	Lesson preparation and planning	4.21	.04 <sup>c</sup>
8.	Concern with character development of the pupils	.22	.64
9.	Training of the pupils in self-expression	1.21	.27
10.	The pupils work well without supervision	.28	.87
11.	Dress and appearance of the teacher	3.68	.06
12.	The use of teaching aids	.002	1.00
13.	Methods of lesson presentation used	1.30	1.00
14.	Training of pupils in civic competence and responsibility	.50	.48
15.	The professional activities of the teacher	3.12	.21
16.	The pupils' appreciation of moral and ethical standards	.36	.83
17.	Examination results	.06	1.00
18.	The teacher's participation and standing in the community	.40	1.00
19.	The teacher's standing with the pupils	1.15	.28
20.	Supervision and checking of written work	.57	1.00
21.	The development of the process of individual enquiry in the pupils	.44	.51
22.	The attitude of the pupils to the school and authority	.19	.66
23.	The loyalty and dependability of the teacher	1.00	1.00
24.	The degree of cooperation of the teacher with other staff members	1.38	1.00





Table 1 (continued)

No.	Criteria	Chi-Square for Goodness of Fit	Probability of a Greater Chi-Square
25.	Provision made for individual differences and group needs	3.73	.15
26.	Qualities of leadership displayed by the teacher	2.58	.10
27.	Concern with the all-round development of the pupils	3.26	.07
28.	Teacher-pupil relationship	1.43	.23
29.	The degree of self-evaluation of processes employed	2.88	.08

<sup>a</sup>Criteria are listed in the same order as they were in the Appendix B Questionnaire.

<sup>b</sup>The "observed" distributions were computed with normalized "expected" distributions calculated using the means of the obtained distributions.

<sup>c</sup>Indicates that the responses were not normally distributed.



after-degree program in 1964-65.

3. The individual filled out the Education Student Attitude Inventory in 1964 or 1968.

4. The individual was teaching or otherwise involved in education in Alberta in the 1970-71 school year.

The first three of the above criteria were met by 396 individuals whose names were forwarded to the Alberta Teachers' Association with a request for the current addresses of those who were presently teaching in Alberta. A total of 288 addresses were provided from the A.T.A. files on active teachers. These 288 individuals formed the sample for the present study.

#### IV. A COMPARISON OF THE STUDY SAMPLE TO THE POPULATION OF EDUCATION STUDENTS

As mentioned above, the individuals included in the study sample were in their fourth year of a Bachelor of Education degree program in 1964-65 or 1967-68, or were in an after-degree program in 1964-65. The population of which this sample is a part included first, second, third and fourth year education students.

Table 2 presents a comparison of means for the population and study sample. This comparison reveals that the study sample had slightly higher means for all but two attitude scales; means for the 203 individuals are slightly higher for Thinking Introversion, Social Introversion, Theoretical Orientation, the Short-Range Realistic, Long-Range Realistic, Long-Range Idealistic and Certain Success aspiration scales, and for the Education Profession Attitude Questionnaire scale; the population had higher means for Estheticism and the





Table 2

Means and Standard Deviations for the 1964-65 Population  
of University of Alberta Education Students, and  
for the Study Sample

Attitude Measures	Population (N = 1983)		Study Sample (N = 203)	
	Means	S.D.	Means	S.D.
<u>OPI Scales</u>				
Thinking Introversion	34.3	9.25	<u>37.9</u>	8.76
Social Introversion	21.0	8.30	<u>21.1</u>	8.56
Theoretical Orientation	16.6	5.60	<u>18.7</u>	5.43
Estheticism	<u>11.9</u>	4.75	10.9	4.79
<u>Aspiration Scales</u>				
Short-Range Realistic	39.3	8.52	<u>40.3</u>	10.0
Short-Range Idealistic	<u>45.4</u>	11.4	44.9	13.4
Long-Range Realistic	44.3	9.78	<u>45.2</u>	14.5
Long-Range Idealistic	50.4	12.1	<u>52.1</u>	14.6
Certain Success	43.3	10.7	<u>44.8</u>	14.2
<u>EPAQ</u>	68.6	6.43	<u>72.8</u>	6.48

Higher means are underlined.



Short-Range Idealistic Aspiration Scale. The higher mean on Estheticism is likely due to the fact that there were more females than males in the population. Ratsoy (1965) found females scored significantly higher on Estheticism. But all the differences were small. This seemed to suggest that the sample chosen for this study was representative of the population of 1964-65 education students as far as attitudes were concerned.

#### IV. DATA COLLECTION

##### Attitude Data

Attitude data for the 288 individuals in the present study had been collected previously. In 1964 Ratsoy administered the Education Student Attitude Inventory to all available students enrolled in the Faculty of Education--a major sample of 1,983 students. One hundred and eighteen of these individuals were included in the sample for the present study. The Education Student Attitude Inventory was again administered to 276 fourth year undergraduate Education students in 1968, and 170 of these individuals made up the 1967-68 subsample for the present study.

##### Teacher Success Data

Teacher success data were collected by means of the Survey of Contributions to Teaching questionnaire described earlier in the present chapter. Follow-up letters were sent to those who did not return the questionnaire within three weeks. If the questionnaire was not returned after an additional three weeks, a second questionnaire and a reminder were forwarded to teachers.



Table 3 provides a breakdown of questionnaire returns. Out of a possible 118 questionnaires for the 1964-65 subsample, 95, or 80.4 per cent, of the questionnaires were returned; 84, or 71.2 per cent, were usable and 7, or 9.2 per cent, were not usable. From a total of 170 possible questionnaires from the 1967-68 subsample, 141, or 82.9 per cent, were returned; 124, or 72.9 per cent, were usable. A total return of 236 questionnaires out of a possible 288 questionnaires was realized, and 208, or 72.2 per cent, of the returns were usable. Attitude data could not be located for five of the 208 respondents who returned completed questionnaires. These five teachers were left out of the analysis. The final sample for the present study was therefore 203 individuals.

## V. METHOD OF DATA ANALYSIS

### Preparation of the Data

Attitude data. Although the attitude data were readily available, it was first necessary to transform data into a form that was usable for this study. The 1964-65 attitude data total scores were in standardized form, so that it was necessary to reconvert them to raw score form. Item responses for the 1967-68 subsample needed to be converted to aggregate scores for each attitude scale; computer programs were utilized in computing the following attitude scores: Thinking Introversion, Theoretical Orientation, Estheticism, Social Introversion, five Education Profession Aspiration Scale scores, and an Education Profession Attitude Questionnaire score.

The scale scores were then punched onto one computer card per





Table 3

## Classification of Responses to Questionnaires That Were Returned

	1964-65 (N = 118)		1967-68 (N = 170)		Total Return (N = 288)	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Returned and Usable	84	71.2%	124	72.9%	208	72.2%
Returned and Not Usable						
Teachers inactive	2	1.7	6	3.5	8	2.8
Refused to complete questionnaire	1	0.8	1	0.6	2	0.7
Questionnaire returned incomplete	1	0.8			1	0.3
• Address unknown	7	5.9	10	5.9	17	5.9
Totals	95	80.4	141	82.9	236	81.9



person along with the background information that had been collected in 1964 or 1968.

Teacher success data. There was a second card per person for the teacher success data. Background information and responses to section two of the Survey of Contributions to Teaching were entered on this card. Numerical values were assigned to section two responses as in the pilot study according to the following scale:

Very High = 5

Above average = 4

Average = 3

Below average = 2

Very low = 1

A computer program was designed for calculating success ratios from section two responses; all the items which respondents had rated were summed and averaged to obtain an overall success ratio; each individual's self-report response scores to presage criteria were summed and averaged to obtain a presage ratio; each individual's self-report response scores to process criteria were summed and averaged to obtain a process ratio; each individual's self-report response scores to product criteria were summed and averaged to obtain a product ratio. A new deck of data cards which included the four teacher success ratios along with background information and individual item responses to section two of the questionnaire was then prepared.

Table 4 reveals that computations of separate presage, process, and product ratios was justified; the low, although statistically





Table 4  
 Pearson Product Moment Intercorrelation  
 Matrix of Teaching Success Ratio  
 (N = 203)

	Overall Success Ratio	Presage Ratio	Process Ratio
Presage Ratio	.71 <sup>a</sup>		
Process Ratio	.87 <sup>a</sup>	.55 <sup>a</sup>	
Product Ratio	.35 <sup>a</sup>	.20 <sup>b</sup>	.17 <sup>c</sup>

<sup>a</sup>Significant at .001 level (two-tailed test).

<sup>b</sup>Significant at .01 level (two-tailed test).

<sup>c</sup>Significant at .05 level (two-tailed test).



significant correlations of .55 between presage and process ratios, .20 between presage and product ratios, and .17 between process and product ratios, are an indication that each of the ratios is measuring a somewhat different aspect of teaching success. The greatest amount of variance accounted for between any two pairs of these three scales was 30 per cent.

### The Analysis

Pearson Product Moment correlations were calculated for all continuous variables, namely for Thinking Introversion, Social Introversion, Theoretical Orientation, Estheticism, five Aspiration Scales, Education Profession Attitude Questionnaire, Overall Success Ratio, Presage Ratio, Process Ratio and Product Ratio.

Next frequencies and percentages were calculated for the background information variables and for the self-report items included in section two of the Survey of Contributions to Teaching. These calculations enabled percentage comparisons to be made between self-report items, and the frequencies found for background information questions facilitated placing teachers into groups prior to statistical analysis.

In order to determine whether differences existed among teachers, comparisons involving two groups were made using a program which provided  $t$  values for the differences between means. Where the variances were not homogeneous, the Welch  $t$  Prime Adjustment was used, and  $t$  values and probabilities were adjusted accordingly.

When three or more groups were being compared, analysis of variance was used. Means, variances, and standard deviations were



examined. In cases where the  $F$  ratio was significant and the variances homogeneous, the Scheffé Comparison of Means was used to identify the pairs of means between which significant differences had occurred (Ferguson, 1966, pp. 296-97).

The a priori level of significance was set at .05 for all  $t$ -tests and  $F$ - tests, and reporting of significance levels was limited to .001, .01, and .05. For the Scheffé test, though, the significance level was set at .10 following a significant  $F$  ratio; the high degree of rigour involved in this test justifies a lower significance level (Ferguson, 1966, p. 297).

Where variances were not homogeneous in the present study, the "apparent" level of significance for the  $F$  ratio was set at .025. In using the analysis of variance test, whenever variances were not homogeneous, the method suggested by Lindquist was followed. Lindquist points out that heterogeneity of variance has a small but real effect on the form of the  $F$ -distribution, and he suggests the following as a solution to the problem:

In general when the heterogeneity in form or variance is "marked" but not "extreme," allowance may be made for this fact by setting a higher "apparent" level of significance for the tests of treatment effects than would otherwise be employed. In cases of very marked heterogeneity, for example, if one wishes the risk of a Type I error not to exceed 5% he might require the effect to be "significant" at the 2.5% level, or if he wants the risk of a Type I error not to exceed 1% he might set the "apparent" level of significance of the test at 0.1% (Lindquist, 1956, p. 86).





## VI. SUMMARY

Attitude data had been collected in 1964-65 and 1967-68 by means of the Education Student Attitude Inventory; but the teacher success data were collected in 1971 by means of the Survey of Contributions to Teaching. When the Survey of Contributions to Teaching was pretested, a Chi-Square analysis revealed that 28 of 29 items included in the questionnaire were normally distributed. No revision needed to be made before the questionnaire was mailed to the study sample of 288 individuals. The teachers included in the study sample (1) had proceeded directly through a four-year Bachelor of Education degree at the University of Alberta, or had entered the Bachelor of Education program after completing another degree, (2) had been enrolled in the fourth year of the Degree program in 1964-65 or 1967-68, or was in his first year of an after-degree program in 1964-65, (3) had filled out the Education Student Attitude Inventory in 1964 or 1968, and (4) had been involved in teaching or some other aspect of education in Alberta during the 1970-71 school year. A total return of 236 questionnaires was realized, and 208 or 72.2 per cent of the returns were usable. The usable returns were submitted to statistical analysis that included computation of: Pearson Product Moment correlations between all continuous teacher attitude and teacher success variables, percentages between self-report items, and variances between biographic subgroups.



## Chapter 4

### ANALYSIS AND RESULTS: SELF-RATING OF TEACHING SUCCESS

#### I. INTRODUCTION

The results of the statistical analysis of the data are presented in two parts. This chapter presents part one of the analysis and is concerned with the first problem of the present study: What factors do Alberta teachers perceive as being important to the teaching act in various subject-matter fields and grades? The discussion centers around the teacher success data which were collected by means of the Survey of Contributions to Teaching.

#### II. CRITERIA WHICH TEACHERS CHECKED

##### Findings

Section two of the data collection instrument was titled "Self-Report on Factors Contributing to Teaching Success" and instructed respondents to check those factors which were important to the teaching act in their field of assignment this year. When frequencies were calculated for each of the twenty-nine factors included in this section, it was found that "teacher-pupil relationship" was the factor that respondents checked most frequently as being a contributor to their teaching success. Out of a total of 203 individuals, 185, or 91.1 per cent, of the respondents checked this process criterion. Table 5 reveals that the criteria that ranked two and three in order of



Table 5

Rank Order of Factors Which Teachers Indicated Were Important to  
the Teaching Act in Their Field of Assignment  
(N = 203)

Rank	Mittel Category	Criteria	Frequency	Per Cent
1	Process	Teacher-pupil relationship	185	91.1%
2	Process	The energy, force and enthusiasm displayed in teaching	183	90.1
3	Process	Pupil participation in lessons	181	88.2
5	Product	Concern with the all-round development of pupils	174	85.8
5	Process	Provision made for individual differences and group needs	174	85.8
5	Presage	The personality of the teacher	174	85.8
7	Presage	Academic qualifications and knowledge of curriculum	173	85.2
8	Process	Class control	170	83.7
9.5	Product	Concern with character development of pupils	166	81.8
9.5	Product	The development of the process of individual enquiry in the pupils	166	81.8
11.5	Presage	The degree of cooperation of the teacher with other staff members	165	81.3
11.5	Process	Lesson preparation and planning	165	81.3
13	Product	Pupil attitudes of courtesy, industry, and self-reliance	160	78.8
14	Presage	The teacher's standing with the pupils	159	78.3
15.5	Process	The degree of self-evaluation of processes employed	152	74.9
15.5	Product	The attitude of pupils to the school and authority	152	74.9
17	Presage	The loyalty and dependability of the teacher	150	74.0
18	Product	The training of the pupils in self-expression	149	73.4
19	Process	Methods of lesson presentation used	143	70.5
20	Process	The use of teaching aids	141	69.5
21	Presage	Qualities of leadership displayed by the teacher	139	68.5





Table 5 (continued)

Rank	Mitzel Category	Criteria	Frequency	Per Cent
22	Product	The pupils work well without supervision	132	65.0%
23	Product	The pupils' appreciation of moral and ethical standards	128	63.0
24	Process	Supervision and checking of written work	124	61.1
25	Presage	Dress and appearance of the teacher	109	53.8
26.5	Product	The training of pupils in civic competence and responsibility	103	50.8
26.5	Presage	The professional activities of the teacher	103	50.8
28.5	Product	Examination results	79	38.9
28.5	Presage	The teacher's participation and standing in the community	79	38.9



importance also are process criteria. In fact five of the ten criteria that received the highest frequencies are process criteria.

Product and presage criteria were deemed to be less important by the Alberta teachers. "Examination results," a product criterion, and "the teacher's participation and standing in the community," a presage criterion, received an identical rank as being the least frequently checked criteria. Of the ten least frequently checked criteria, four were presage criteria, four were product criteria, and only two were process criteria.

### Discussion

The finding that process criteria were highly stressed is in common with another recent Alberta study involving Alberta junior and senior high school principals. Rogers (1970) noted that process criteria were highly stressed, and that product criteria such as "Examination results" were not highly emphasized by the Alberta principals. In the Rogers study, as in the present study, "examination results" and "the teacher's participation and standing in the community" received identical rankings, as Table 6 shows. Most other criteria also received similar emphasis from teachers and principals. These similarities between the two studies seem to indicate that administrators and teachers have similar perceptions of the importance that the listed criteria have to teaching.

The one criterion showing the greatest disparity in the rankings of the two studies was "qualities of leadership displayed by the teacher," the teacher ranking for this criterion was twenty-one while the principal



Table 6

Rankings Given to Teacher Success Criteria by Alberta Principals  
in 1970 and by Alberta Teachers in 1971

Mitzel Category	Criteria	Ranks	
		Alberta <sup>a</sup> Teachers (N = 203)	Alberta <sup>b</sup> Principals (N = 174)
Process	Teacher-pupil relationship	1	2.5
Process	The energy, force and enthusiasm displayed in teaching	2	1
Process	Pupil participation in lessons	3	6
Product	Concern with the all-round development of pupils	5	4
Process	Provision made for individual differences and group needs	5	7
Presage	The personality of the teacher	5	9
Presage	Academic qualifications and knowledge of the curriculum	7	5
Process	Class control	8	2.5 <sup>c</sup>
Product	Concern with character development of pupils	9.5	14
Product	The development of the process of individual enquiry in the pupils	9.5	15 <sup>c</sup>
Presage	The degree of cooperation of the teacher with other staff members	11.5	11
Process	Lesson preparation and planning	11.5	13
Product	Pupil attitudes of courtesy, industry, and self-reliance	13	10
Presage	The teacher's standing with the pupils	14	19 <sup>c</sup>
Process	The degree of self-evaluation of processes employed	15.5	23 <sup>c</sup>
Product	The attitude of the pupils to the school and authority	15.5	16
Presage	The loyalty and dependability of the teacher	17	11.5
Product	The training of the pupils in self-expression	18	17
Process	Methods of lesson presentation used	19	24
Process	The use of teaching aids	20	22





Table 6 (continued)

Mitzel Category	Criteria	Ranks	
		Alberta <sup>a</sup> Teachers (N = 203)	Alberta <sup>b</sup> Principals (N = 174)
Presage	Qualities of leadership displayed by the teacher	21	8 <sup>c</sup>
Product	The pupils work well without supervision	22	18
Product	The pupils' appreciation of moral and ethical standards	23	26.5
Process	Supervision and checking of written work	24	20
Presage	Dress and appearance of the teacher	25	21
Product	The training of pupils in civic competence and responsibility	26.5	25
Presage	The professional activities of the teacher	26.5	26.5
Product	Examination results	28.5	28
Presage	The teacher's participation and standing in the community	28.5	29

<sup>a</sup>Ranks listed as given in Table 3.<sup>b</sup>Ranks abstracted from Rogers' (1970) study.<sup>c</sup>Criteria showing a disparity of five or more ranks.



ranking was eight. Administrators appear to place greater emphasis on leadership than do teachers.

Four other criteria showed a disparity of five ranks or greater; these criteria are: "class control," "the development of the process of individual enquiry in the pupils," "the teacher's standing with the pupils," and "the degree of self-evaluation of processes employed." "Class control" received a higher rank from principals than from teachers, and the other three criteria received lower ranks from principals than teachers.

### III. ADDITIONAL CRITERIA

As in the Rogers study, space was provided for respondents to list additional criteria that they felt contributed to their teaching success. Of 203 respondents, 79 took the opportunity to list additional criteria.

A listing of these criteria is presented in Table 7. The table reveals that presage criteria were most frequently added to the Questionnaire, with process criteria following a close second. "Accomplishment or progress of students" was the only additional product criterion that was added, and it appeared in only one questionnaire.

Since respondents were concerned with their own teaching success, it is understandable that some individuals would attribute their own personality, or presage criteria, as contributing to their teaching success. Criteria predictive of pupil growth were not highly stressed when respondents were asked to check factors that contributed



Table 7

Additional Criteria Listed by Respondents as Contributing  
to Teaching Success  
(N = 203)

Mitzel Category	Criteria	Frequency
Process	Extra curricular involvement	11
Presage	Willingness to experiment with new approaches and materials	7
Presage	A genuine interest in the student as an unique individual	7
Process	Home-school communication	6
Process	Listening to what students have to say	5
Process	Freedom to develop curriculum	5
Presage	Sense of humor	5
Process	Use of counsellor	4
Presage	Patience	3
Process	Inservice	3
Process	Administrative support for the teacher	3
Presage	Summer, leadership and evening courses	3
Presage	Professional reading	3
Process	Use of a variety of media	2
Presage	Enjoying teaching	2
Presage	Fairness in demand	2
Presage	Make use of resource people	2
Presage	Ability to communicate with students	2
Presage	Ability to use political channels in the system	2
Presage	Upholding a professional standard of performance	2





Table 7 (continued)

Mitzel Category	Criteria	Frequency
Process	Field trips	2
Process	Cooperative teaching	2
Presage	Experience by travelling	2
Presage	Concern for and referral of students with special problems	2
Process	Flexibility in planning	2
Process	Educational philosophy of the school	2
Presage	Knowledge of pupil background in home and school	2
Presage	Lack of aspiration for administrative position	1
Presage	Willing to be corrected	1
Presage	Work well with administrators	1
Presage	Resourceful and creative	1
Presage	Varied teaching experiences in elementary, secondary, post-secondary	1
Process	Interaction with those in education and social sciences who are engaged in research at frontiers of their disciplines	1
Process	Utilizing classroom incidents for learning situations	1
Process	Provision for pupil participation in planning	1
Process	Independent student work	1
Presage	General intellectual curiosity of the teacher	1
Product	Accomplishment or progress of students	1
Presage	Concern with pupil happiness within the area of instruction	1
Presage	The ability to speak clearly	1
Presage	Skill in asking students questions	1



to their teaching, so that listing of additional product criteria is not to be expected. Product criteria were not highly emphasized in the Rogers findings and in previous findings discussed in this chapter. Therefore, one would not expect changes produced in students to receive emphasis in an additional listing of criteria.

#### IV. RATING OF TEACHING SUCCESS

Not only were respondents instructed to check those criteria which they felt were important to the teaching act in their field of concentration and to list additional criteria which contributed to their teaching success, but they were also instructed to indicate their contribution on each of these factors. An Overall Teacher Success ratio was calculated by adding together and averaging the numerical values for the factors checked and the additional criteria listed. Presage, process, and product ratios were also calculated by this method.

There was a fair degree of similarity among teacher success ratio means, as is evidenced in Table 8. Although respondents most frequently checked process criteria, they rated themselves on the average most highly on presage criteria; the study sample mean for the presage ratios was 3.71 while the process mean was 3.61. The lowest mean was the product mean of 3.39, which seems to indicate that most respondents rated themselves lower on the product criteria they checked. At the same time the product ratios had the highest standard deviation; the greater disagreement on rating of product criteria likely contributed to the lower product mean obtained in this study.



Table 8  
Means and Standard Deviations for  
Teacher Success Ratios  
(N = 203)

Ratio	Means	Standard Deviations
Overall Success	3.62	.45
Presage	3.71	.57
Process	3.61	.50
Product	3.39	.78





## V. SUMMARY

This part of the analysis was devoted to a discussion of the teaching success instrument, the Survey of Contributions to Teaching. Of the factors teachers checked, the process criterion, "teacher-pupil relationship" was the factor respondents checked most frequently as being a contributor to their teaching success. In fact, process criteria were highly stressed while product and presage criteria were deemed to be less important by the study sample of Alberta educators. Some 79 respondents listed additional criteria on their questionnaires; presage criteria were the most frequently mentioned. Respondents were also asked to indicate their contribution on criteria they checked; on the average respondents rated themselves most highly on presage criteria and lowest on product criteria.



## Chapter 5

### ANALYSIS AND RESULTS: A COMPARISON OF TEACHING ATTITUDES AND TEACHING SUCCESS

#### I. INTRODUCTION

What is the relationship between the attitudes prospective teachers possess at the completion of a four-year preparation program and their subsequent success as teachers? What influence do biographic variables have on the relationship between teacher attitudes and teacher success? The above questions are statements of the second and third problems of the present study. Part two of the analysis presents the findings pertaining to these two problems.

#### II. THE ENTIRE SAMPLE

##### Findings

Pearson Product Moment correlations were calculated between each of the teacher success ratios and the attitude and aspiration measures in an attempt to answer the second problem of the present study. The results were as indicated in Table 9. The correlations between the Omnibus Personality Inventory (OPI) scale, Thinking Introversion, and the teacher success ratios are especially important since all four teacher success ratios correlated significantly with this attitude scale. The correlation of .25 between Thinking Introversion and the Overall Success Ratio was significant at the .001 level; the



Table 9

Pearson Product Moment Correlations Between Teacher  
Attitudes and Teacher Success Ratios  
(N = 203)

TEACHER ATTITUDES	TEACHER SUCCESS RATIOS			Product Ratio
	Overall Success Ratio	Presage Ratio	Process Ratio	
<u>OPI Scales</u>				
Thinking Introversion	.25 <sup>a</sup>	.15 <sup>c</sup>	.20 <sup>b</sup>	.16 <sup>c</sup>
Social Introversion	-.07	-.15 <sup>c</sup>	-.04	-.03
Theoretical Orientation	.20 <sup>a</sup>	.15 <sup>c</sup>	.13	.10
Estheticism	-.03	-.05	-.02	-.09
<u>Aspiration Scales</u>				
Short-Range Realistic	.12	.12	.09	-.07
Short-Range Idealistic	.02	-.04	.002	-.07
Long-Range Realistic	.12	.04	.05	.03
Long-Range Idealistic	.08	.05	.01	.02
Certainty of Attainment	.17 <sup>c</sup>	.15 <sup>c</sup>	.11	.009
<u>EPAQ</u>	.12	.11	.11	-.04

<sup>a</sup>Significant at .001 level.

<sup>b</sup>Significant at .01 level.

<sup>c</sup>Significant at .05 level.

<sup>a</sup> Significant at .001 level.<sup>b</sup> Significant at .01 level.<sup>c</sup> Significant at .05 level.





correlation of .15 between Thinking Introversion and the Presage Ratio and of .16 between Thinking Introversion and the Product ratio were both significant at the .05 level; the correlation of .20 between Thinking Introversion and the Process Ratio was significant at the .01 level.

There were other significant correlations involving OPI scale data, but significance was not achieved with all the teacher success ratios. One of these significant relationships occurred between Social Introversion and the Presage Ratio; the correlation of .15 was significant at the .05 level. Two other significant findings involved Theoretical Orientation, namely a correlation of .20 with the Overall Success Ratio, and a correlation of .15 with the Presage Ratio. The levels of confidence for these two correlations were .001 and .05 respectively.

Estheticism, the fourth OPI scale, showed no significant relationships with any of the four teacher success ratios.

The two short-range and the two long-range aspiration scales were not significantly related to teaching success as measured in this study. Only the aspiration scale titled "Certainty of Attainment" was significantly related to teaching success; the correlations of .17 between the Overall Success ratio and Certainty of Attainment, and .15 between the Presage ratio and Certainty of Attainment were significant at the .05 level.

Scores on the Education Profession Attitude Questionnaire (EPAQ) did not correlate significantly with any of the teacher success ratios.



## Discussion

Although the correlations were small, the finding of significant positive correlations between Thinking Introversion and the four teacher success ratios points to a trend; that is, the lower the Thinking Introversion score, the lower is the self-concept of teaching success, and conversely, that the higher the Thinking Introversion score the higher is the self-concept of teaching success.

The significant negative correlation between Social Introversion and the Presage ratio implies an inverse relationship, that is, high scorers on Social Introversion tended to have low self-ratings, while low scorers on Social Introversion tended to have high self-ratings. Low scorers, that is, individuals who seek social contacts and gain satisfaction from them, might be encouraged to become teachers, providing high self-ratings of teaching success are deemed necessary for successful teaching.

Significant positive relationships between Theoretical Orientation and the two teacher success ratios, Overall Success and Presage, suggest that high scorers on Theoretical Orientation have a tendency to attain higher scores on the two teaching success ratios than do low scorers on Theoretical Orientation. According to the Omnibus Personality Inventory Research Manual (1962, p. 5) those high on Theoretical Orientation were found to be logical, rational and critical in their approach to problems. Such a personality characteristic might have an influence in making the individual more confident. One could further speculate that this confidence might be reflected in the higher Overall Success and Presage ratios obtained by those high in Theoretical



## Orientation.

Whereas the attitudes Thinking Introversion, Social Introversion and Theoretical Orientation were related to self-ratings of teaching success, the fourth OPI scale, Estheticism was not related to self-ratings of teaching success. Interest or disinterest in painting, sculpture, music, literature, and dramatics did not appear to be appreciably related to teaching success.

Scores on four of the five aspiration scales were not related to teacher self-ratings. Only the fifth aspiration scale, Certainty of Attainment, was directly related to ratios of Overall Success and Presage. Both the level of aspiration and the teacher success ratios were measures of self-concept, and this might be a possible reason why significant correlations were found. Ratsoy (1965, p. 110) indicates that the fifth aspiration scale, in this study labelled Certainty of Attainment, was "based on a global quantification of their self-concept." This self-concept may have had an influence on the Overall Success and Presage ratios obtained in the present study.

With the current emphasis on professionalism, the finding that there were no significant relationships between the Education Profession Attitude Questionnaire and teacher success ratios is worthy of mention. Teacher success ratios did not appear to be associated with the degree to which teachers agreed with the policy of their professional organization.





### III. BIOGRAPHIC COMPARISONS

In order to determine whether subgroups within the study sample influenced the relationships that were found between teacher attitudes and teacher success, further analyses were carried out by subdividing the sample on the basis of personal variables and professional variables. The personal variables included comparisons by age and sex; the professional variables included comparisons by year of attendance at university, route, cumulative university average, university preparation, division where main responsibility lies, teaching position, main subject area of assignment and time of questionnaire return.

Why were these variables chosen at the exclusion of others? One reason is that these comparisons have been utilized in previous research. The review of research in chapter two revealed that sex has been a factor in numerous studies where teacher attitudes or self-evaluation of teaching effectiveness were the subject of study. This same chapter points out that "division where main responsibility lies" has also been found to be a factor in past studies. Since the present study was a follow-up study, there was ample opportunity to use information that was already available. Sex, age, route, and cumulative university average comparisons were made by Ratsoy (1965); comparisons using these variables also formed a part of the present study.

#### Personal Variables

Sex. The first personal variable analyzed was sex of respondent.

1. Findings. Table 10 reveals that males achieved significantly higher means, at the .001 level, for Theoretical Orientation and for



Table 10

A Comparison of Attitude Means and Teacher Success Means  
When Teachers Were Grouped by Sex  
(N = 203)

	Means			
	Male (N=129)	Female (N=74)	t	Level of Significance
ATTITUDE MEASURES				
<u>OPI Scales</u>				
Thinking Introversion	<u>38.3</u>	37.1	.91	NS
Social Introversion	21.0	<u>21.2</u>	.21	NS
Theoretical Orientation	<u>20.1</u>	16.2	5.29	.001
Estheticism	9.58	<u>13.2</u>	5.51	.001
<u>Aspiration Scales</u>				
Short-Range Realistic	<u>42.1</u>	37.0	3.59	.001
Short-Range Idealistic	<u>47.8</u>	39.8	4.29	.001
Long-Range Realistic	<u>48.9</u>	38.6	5.17	.001
Long-Range Idealistic	<u>55.8</u>	45.8	4.94	.001
Certainty of Attainment	<u>47.6</u>	40.0	3.77	.001
<u>EPAQ</u>	72.7	<u>72.9</u>	.21	NS
TEACHER SUCCESS RATIOS				
Overall Success	<u>3.68</u>	3.51	2.74	.01
Presage	<u>3.80</u>	3.57	2.69	.01
Process	<u>3.63</u>	3.57	.80	NS
Product	<u>3.40</u>	3.38	.19	NS

Higher means are underlined.



each of the five Aspiration Scales.

The male subgroup also achieved significantly higher means on two teacher success ratios, the Overall Success Ratio and the Presage Ratio: both differences were significant at the .01 level.

Females had only one significantly higher mean. Their mean of 13.2 for Estheticism was significantly higher at the .001 level.

2. Discussion. The male subgroup had a higher mean for Theoretical Orientation and this might relate to males having significantly higher Overall Success and Presage ratios. Table 9 supports this inference; the table shows that significant correlations existed between Theoretical Orientation and the Overall Success and Presage ratios.

The finding that all five male aspiration scores were higher on the average than were female aspiration scores might also contribute to higher teacher success ratios for the male subgroup. One could speculate that males, even while still in attendance at university, realized that promotion in education is based on high quality teaching. Since they seemed to have high aspirations, they may have tried harder to be good teachers, and may have rated themselves highly on their contributions to teaching. This remains largely a speculation and suggests that further research should be done on the relationship between teacher aspirations and teacher success.

How do the differences in self-evaluation between the two sexes which were identified in the present study compare with findings in other studies? Studies reviewed in the second chapter do not support





the findings of the present study, that is, in the present study one sex did not score higher than the other in self-evaluation. Only the findings of a recent study conducted by Peek (1971) support the findings of the present study. From a comparison of teacher self-analysis and Flanders Verbal interaction analysis involving 52 Texas classroom teachers, Peek concluded that there appeared to be a significant difference in the self-analysis of male and female teachers.

Age. In order to make an age comparison, teachers were grouped according to age information they had provided while attending university in 1964-65 or 1967-68. The data were analyzed in three subgroups, "19 to 21," "22 to 25," and "Over 25."

1. Findings. The results of the age comparison are as indicated in Table 11. The oldest subgroup had significantly higher means on Thinking Introversion, the Overall Success Ratio and the Process ratio than either the "19 to 21" or "22 to 25" subgroups, and had a significantly higher mean on Theoretical Orientation than the youngest subgroup.

The "22 to 25" subgroup obtained significantly higher means on two aspiration scales: the mean of 42.2 on the Short-Range Realistic aspiration was significantly higher than the mean for the oldest subgroup; the Long-Range Realistic aspiration mean was significantly higher than the mean for the "over 25" subgroup.

No significantly higher means were recorded for the "19 to 21" subgroup.



Table 11

A Comparison of Attitude Means and Teacher Success Ratio Means for Teachers Classified According to Age

Attitude Measures	A 19 to 21 (N = 72)	B 22 to 25 (N = 73)	MEANS C Over 25 (N = 58)	F Ratio	Significance & Significantly Different Pairs
<u>OPI Scales</u>					
Thinking Introversion	36.3	37.0	<u>40.8</u>	4.87	.01 A-C, B-C
Social Introversion	20.7	20.2	<u>22.6</u>	1.30	NS
Theoretical Orientation	17.3	19.0	<u>20.0</u>	4.01	.05 A-C
Estheticism	<u>11.5</u>	10.0	11.3	1.95	NS
<u>Aspiration Scales</u>					
Short-Range Realistic	41.3	<u>42.2</u>	36.5	6.07 <sup>b</sup>	.01 A-C, B-C
Short-Range Idealistic	46.3	<u>46.9</u>	40.8	4.04 <sup>b</sup>	NS
Long-Range Realistic	45.9	<u>47.8</u>	40.8	4.03	.05 B-C
Long-Range Idealistic	50.2	56.2	49.3	4.69 <sup>b</sup>	NS
Certainty of Attainment	44.1	46.8	43.3	1.11 <sup>b</sup>	NS
<u>EPAQ</u>	72.3	72.4	<u>72.8</u>	0.94	NS
<u>Teacher Success Ratios</u>					
Overall Success	3.52	3.59	<u>3.79</u>	6.74	.01 A-C, B-C
Presage	3.57	3.77	3.83	4.05 <sup>b</sup>	NS
Process	3.51	3.56	3.78	5.32	.01 A-C, B-C
Product	3.40	<u>3.41</u>	3.37	.03	NS

<sup>a</sup> Higher means are underlined.

<sup>b</sup> The level of significance was set at .025 where variances were not homogeneous.



2. Discussion. Age seemed to have a positive effect on the self-concept of teaching success, that is, an individual's rating of himself seemed to increase with age. Overall Success and Process means seemed to increase with age, with the oldest subgroup having significantly higher means on both of these measures.

The same trend was evident for Thinking Introversion, Social Introversion, and Theoretical Orientation scores. These attitudes seemed to increase with age, and once again the oldest subgroup had the significantly higher means on Thinking Introversion and Theoretical Orientation. This predisposition of the oldest subgroup to reflective thought and to an interest in science and scientific activities might have influenced individuals of this subgroup to give higher ratings to personality or presage criteria which were included in the calculation of Overall Success and Presage ratios.

### Professional Variables

Year of attendance at university. The study sample consisted of individuals who had completed their fourth year in either 1965 or 1968, and the first professional variable comparison made was a 1965 and 1968 comparison to determine whether there was a relationship between length of time since completing certification requirements and self-evaluation of teaching success.

1. Findings. Table 12 presents the results of this first comparison. Only two sets of means were significantly different and they were: the 1965 group had a significantly higher mean Short-Range Idealistic Aspiration level than did the 1968 sub-sample, and





Table 12

A Comparison of Attitude Means and Teacher Success Ratio  
Means for Teachers Classified by Year of  
Attendance at University  
(N = 203)

	Means			Level of
	1965 (N=84)	1968 (N=119)	t	Significance
ATTITUDE MEASURES				
<u>OPI Scales</u>				
Thinking Introversion	<u>38.5</u>	37.4	.94	NS
Social Introversion	20.6	<u>21.4</u>	.66	NS
Theoretical Orientation	<u>19.1</u>	18.4	.85	NS
Estheticism	<u>10.9</u>	<u>10.9</u>	.06	NS
<u>Aspiration Scales</u>				
Short-Range Realistic	<u>43.4</u>	39.5	1.31	NS
Short-Range Idealistic	<u>47.2</u>	43.3	2.03	.05
Long-Range Realistic	<u>46.9</u>	43.9	1.44	NS
Long-Range Idealistic	<u>53.9</u>	50.9	1.44	NS
Certainty of Attainment	44.3	<u>45.2</u>	.45	NS
<u>EPAQ</u>	70.4	<u>74.5</u>	4.48 <sup>a</sup>	.001
TEACHER SUCCESS RATIOS				
Overall Success	<u>3.68</u>	3.58	1.68	NS
Presage	<u>3.76</u>	3.68	.98 <sup>a</sup>	NS
Process	<u>3.63</u>	3.60	.45	NS
Product	<u>3.46</u>	3.35	1.01	NS

<sup>a</sup> Variances were unequal so that "t" values were adjusted using the Welch method.

Higher means are underlined.



the 1968 sub-sample had a significantly higher EPAQ score or orientation to a professional teachers' organization than did the 1965 group.

2. Discussion. There were no significant relationships involving other attitude measures or the teacher success ratios. Amount of teaching experience did not appear to be related to teacher attitudes or self-ratings of teaching success.

Route. A comparison based on whether individuals took the elementary or secondary route in their teacher preparation program yielded results as indicated in Table 13.

1. Findings. Elementary majors had significantly higher means, on Estheticism and the Process Ratio of teaching success. The means for secondary majors were significantly higher on Theoretical Orientation and the five Aspiration Scales.

2. Discussion. The finding that the Process ratio was significantly higher for elementary than secondary majors is as expected. There is typically a greater emphasis on process skills in the elementary than the secondary school.

3. Results of further analysis. Because of the possibility that sex differences were in part responsible for the differences in attitudes, elementary and secondary majors were regrouped as male and female, and a further analysis was carried out.

The findings are presented in Table 14. This analysis revealed



Table 13

A Comparison of Attitude Means and Teacher Success Ratio  
Means for Teachers Classified by Teaching Route  
(N = 202)

	Means			Level of
	Elementary (N=46)	Secondary (N=156)	t	Significance
ATTITUDE MEASURES				
<u>OPI Scales</u>				
Thinking Introversion	37.0	<u>38.1</u>	.78	NS
Social Introversion	<u>23.2</u>	20.5	1.93	NS
Theoretical Orientation	17.2	<u>19.1</u>	2.19	.05
Estheticism	<u>12.0</u>	10.6	2.16	.05
<u>Aspiration Scales</u>				
Short-Range Realistic	35.9	<u>41.6</u>	3.43	.001
Short-Range Idealistic	39.2	<u>46.7</u>	3.40	.001
Long-Range Realistic	40.7	<u>46.5</u>	2.42	.05
Long-Range Idealistic	45.7	<u>54.1</u>	3.54	.001
Certainty of Attainment	40.3	<u>46.3</u>	2.55	.05
<u>EPAQ</u>	<u>73.0</u>	72.7	.34	NS
TEACHER SUCCESS RATIOS				
Overall Success	<u>3.67</u>	3.60	.92	NS
Presage	<u>3.74</u>	3.70	.43	NS
Process	<u>3.75</u>	3.57	2.19	.05
Product	3.29	<u>3.42</u>	.86 <sup>a</sup>	NS

<sup>a</sup>Variances were unequal so that "t" values were adjusted using the Welch Method.

Higher means are underlined.





Table 14

A Comparison of Attitude Means and Teacher Success Ratio Means  
for Teachers Classified by Teaching Level and by Sex

	Elementary				Secondary			
	Means		t	Level of Signif.	Means		t	Level of Significance
	Female (N=28)	Male (N=18)			Female (N = 46)	Male (N=110)		
ATTITUDE MEASURES								
OPI Scales								
Thinking Introversion	35.4	39.5	1.67	NS	38.2	38.1	.02	NS
Social Introversion	23.4	22.9	.17	NS	19.9	20.7	.50	NS
Theoretical Orient.	15.6	19.5	2.22	.05	16.5	20.2	4.32	.001
Estheticism	12.4	11.4	.86	NS	13.7	9.28	5.34	.001
Aspiration Scales								
Short-Range Realistic	32.9	40.6	2.63	.05	39.5	42.4	1.71	NS
Short-Range Idealistic	34.5	46.7	3.09	.01	43.1	48.2	2.33	.05
Long-Range Realistic	33.8	51.4	4.74 <sup>b</sup>	.001	41.5	48.6	3.01	.01
Long-Range Idealistic	40.1	54.4	3.60	.001	49.2	56.2	2.89	.01
Certainty of Attain.	33.6	50.7	4.51	.001	44.0	47.2	1.37	NS
EPAQ	72.1	74.6	1.43	NS	73.4	72.4	.82	NS
TEACHER SUCCESS RATIO								
Overall Success	3.55	3.86	2.08	.05	3.48	3.65	2.13	.05
Presage	3.61	3.95	2.05	.05	3.55	3.76	2.13	.05
Process	3.66	3.90	1.47	NS	3.52	3.59	.80	NS
Product	3.43	3.06	1.01 <sup>b</sup>	NS	3.35	3.45	1.01 <sup>b</sup>	NS

<sup>a</sup>Higher means are underlined.

<sup>b</sup>Variances were not homogeneous so that "t" values were adjusted using the Welch Method.



that males in both the elementary and the secondary routes had higher means on Theoretical Orientation and the five aspiration scales. For Estheticism the difference between females and males seems to hold at the secondary but not at the elementary level.

Cumulative university average. Individuals in the 1965 and 1968 studies were asked to provide self-reports on their cumulative university average. This information was utilized in a comparison involving four subgroups; those whose average was below sixty-five, those whose average was from sixty-five to sixty-nine; those whose average was seventy to seventy-four, and those whose average was above seventy-four.

1. Findings. The results of this comparison are summarized in Table 15. Only one significant difference occurred: the "75 and over" subgroup obtained a significantly higher mean than the "to 64" subgroup on Thinking Introversion. All other attitude and teacher success ratio comparisons did not yield significant F ratios.

2. Discussion. An almost complete absence of significant differences appears to be an indication that there is no relationship between university average and the various measures of teacher success ratios. University average does not seem to be a factor accounting for the teacher attitude-teacher success relationships found in the present study. These findings may be surprising to many Alberta educators who place emphasis on university transcripts when hiring teachers because of their feeling that teacher performance in class is related to academic achievement.



Table 15

A Comparison of Attitude Means and Teacher Success Ratio Means for Teachers Classified According to University Average

	Means				F Ratio	Significance & Significantly Different Pairs
	A To 64 (N=82)	B 65 to 69 (N=58)	C 70 to 74 (N=38)	D 75 & over (N=19)		
ATTITUDE MEASURES						
OPI Scales						
Thinking Introversion	35.7	37.8	40.2	<u>42.8</u>	4.75	.01 A-D
Social Introversion	<u>22.7</u>	19.8	20.7	18.2	2.14	NS
Theoretical Orientation	18.0	18.7	19.4	<u>20.4</u>	1.22	NS
Estheticism	10.0	11.4	11.2	<u>12.3</u>	1.68	NS
Aspiration Scales						
Short-Range Realistic	39.6	41.0	39.0	<u>45.5</u>	2.37 <sup>b</sup>	NS
Short-Range Idealistic	<u>47.1</u>	43.6	43.4	46.7	1.26	NS
Long-Range Realistic	44.6	46.3	45.1	<u>49.4</u>	.68 <sup>b</sup>	NS
Long-Range Idealistic	<u>54.0</u>	50.8	51.9	<u>51.7</u>	.66 <sup>b</sup>	NS
Certainty of Attainment	46.0	43.6	43.6	<u>50.8</u>	1.60	NS
EPAQ	71.7	73.1	73.9	<u>74.4</u>	1.50	NS
TEACHER SUCCESS RATIOS						
Overall Success	<u>3.63</u>	<u>3.63</u>	3.60	3.59	.08	NS
Presage	<u>3.77</u>	3.61	3.76	3.70	1.04 <sup>b</sup>	NS
Process	3.57	3.63	<u>3.64</u>	<u>3.64</u>	.25	NS
Product	<u>3.50</u>	3.44	<u>3.27</u>	<u>3.39</u>	2.37 <sup>b</sup>	NS

<sup>a</sup>Highest means are underlined.

<sup>b</sup>The level of significance was set at .025 where variances were not homogeneous.





University preparation. Part A of the Survey of Contributions to Teaching requested information regarding amount of university preparation. This information was utilized in an analysis of variance involving the following three subgroups: "Four Years," "Five Years," and "Six Years."

1. Findings. The analysis yielded results as indicated in Table 16. The three significant F ratios, all significant at the .01 level of confidence, involved the Long-Range Realistic Aspiration scale, the Overall Success Ratio, and the Process Ratio; the six-year subgroup had a significantly higher Long-Range Realistic aspiration mean than did the subgroup with four years of preparation, the six-year subgroup had a significantly higher Overall Success ratio mean than the other two subgroups who had four and five years of university preparation, and the six-year subgroup had a significantly higher Process ratio mean than the subgroup with four years of university education.

2. Discussion. An increase in university preparation was to some extent accompanied by a significant increase in Overall Success and Process teacher success ratio means. There seemed to be no relationship between amount of preparation and Presage or Product teacher success ratios.

Although amount of university preparation therefore seemed to be somewhat related to self-ratings of teaching success, it is difficult to explain why this was so. Perhaps individuals become more confident as they obtain more university training, and this confidence may have a positive relationship to self-appraisals of teaching success.



Table 16

A Comparison of Attitude Means and Teacher Success Ratio Means for Teachers Classified by Amount of University Preparation

	Means			F Ratio	Significance & Significantly Different Pairs
A Four Years (N=136)	B Five Years (N=46)	C Six Years (N=20)			
ATTITUDE MEASURES					
OPI Scales					
Thinking Introversion	37.8	37.0	40.3	1.01	NS
Social Introversion	20.3	22.2	20.1	.54	NS
Theoretical Orientation	18.1	19.4	20.3	1.98	NS
Estheticism	11.2	10.1	10.2	1.17	NS
Aspiration Scales					
Short-Range Realistic	39.7	39.7	45.0	2.51	NS
Short-Range Idealistic	43.8	46.3	49.6	2.01	NS
Long-Range Realistic	43.4	46.6	54.0	5.08	.01 A-C
Long-Range Idealistic	51.5	51.0	59.2	2.61	NS
Certainty of Attainment	44.8	43.3	49.0	1.15	NS
EPAQ	73.5	71.1	71.9	2.56	NS
TEACHER SUCCESS RATIOS					
Overall Success	3.57	3.65	3.93	5.99	.01 A-C, B-C
Presage	3.68	3.79	3.84	1.10	NS
Process	3.54	3.67	3.93	5.84	.01 A-C
Product	3.65	3.53	3.42	.79	NS

<sup>a</sup>Higher means are underlined.



Division where main responsibility lies. Another analysis involved the grade level in which the teacher's main responsibilities lay at the time when they completed the Survey of Contributions to Teaching. The data were grouped into three categories, namely, Elementary, Junior High and Senior High subgroups.

1. Findings. The comparisons between means identified significant differences for one attitude measure and all five Aspiration Scales, as Table 17 reveals; the Elementary subgroup mean was significantly higher than the Senior High subgroup mean on Estheticism; the five aspiration scale means for the Senior High subgroup were significantly higher than Elementary and Junior High subgroups means. Differences on the other teacher attitude measures and on the four teacher success ratios were not significant.

2. Discussion. Since the significant differences in attitudes were not accompanied by significant differences in teacher success ratios, grade level does not appear to influence the relationships found between teacher attitudes and teacher success. Nevertheless, learning that there were no significant differences in teacher success ratios between grade levels is an interesting finding in itself. It was encouraging to find that the Division in which a teacher taught did not affect his self-concept of teaching success. All grades are equally important if one accepts the assumption that education is a continuous process.

Teaching position. In filling out the Background Information





Table 17

A Comparison of Attitude Means and Teacher Success Ratio Means for Teachers Classified by Teaching Level

	Means				
	A Elementary (N=52)	B Junior High (N=56)	C Senior High (N=66)	F Ratio	Significance & Significantly Different Pairs
ATTITUDE MEASURES					
OPI Scales					
Thinking Introversion	36.4	37.5	39.4	1.82 <sup>b</sup>	NS
Social Introversion	23.9	21.5	19.2	5.18	.01 A-C
Theoretical Orientation	17.8	18.5	19.6	1.63	NS
Estheticism	11.3	10.4	11.1	.50	NS
Aspiration Scales					
Short-Range Realistic	36.0	39.2	43.0	8.45 <sup>b</sup>	.001 A-B, A-C
Short-Range Idealistic	39.7	45.4	47.9	6.11 <sup>b</sup>	.01 A-B, A-C
Long-Range Realistic	38.8	45.3	47.9	6.12 <sup>b</sup>	.01 A-B, A-C
Long-Range Idealistic	45.5	53.2	54.5	6.56	.01 A-B, A-C
Certainty of Attainment	38.5	45.7	45.9	5.58	.01 A-B, A-C
EPAQ	72.0	72.9	73.1	.44	NS
TEACHER SUCCESS RATIOS					
Overall Success	3.56	3.54	3.67	1.56	NS
Presage	3.67	3.67	3.76	1.00	NS
Process	3.58	3.53	3.66	1.05	NS
Product	3.50	3.40	3.45	.33 <sup>b</sup>	NS

<sup>a</sup> Highest means are underlined.

<sup>b</sup> The level of significance was set at .025 where variances were not homogeneous.



Table 18

A Comparison of Attitude Means and Teacher Success Ratio Means for Teachers Classified by Position Held

	Means				F Ratio	Significance & Significantly Different Pairs
	A Teacher (N=152)	B Consultant (N=15)	C Counselor (N=10)	D Administrator (N=14)		
ATTITUDE MEASURES						
OPI Scales						
Thinking Introversion	37.7	38.4	<u>38.5</u>	38.3	.07	NS
Social Introversion	<u>21.5</u>	17.7	<u>21.5</u>	18.6	1.30	NS
Theoretical Orientation	18.5	<u>21.0</u>	18.4	18.4	.95	NS
Estheticism	10.8	<u>10.1</u>	<u>12.2</u>	11.3	.45	NS
Aspiration Scales						
Short-Range Realistic	40.1	39.3	41.7	43.4	.60	NS
Short-Range Idealistic	44.4	43.2	48.2	<u>51.9</u>	1.61	NS
Long-Range Realistic	44.3	48.0	<u>49.5</u>	47.9	.80	NS
Long-Range Idealistic	50.6	53.9	<u>56.3</u>	<u>60.4</u>	2.35	NS
Certainty of Attainment	44.2	43.7	39.3	<u>57.5</u>	4.56	.01 A-D, B-D C-D
EPAQ						
TEACHER SUCCESS RATIOS						
Overall Success	3.59	<u>3.73</u>	3.62	3.72	.72	NS
Presage	3.68	<u>3.85</u>	3.73	<u>3.90</u>	.90 <sup>b</sup>	NS
Process	3.58	<u>3.78</u>	3.66	3.67	.86	NS
Product	3.44	<u>3.24</u>	<u>3.53</u>	3.37	.47 <sup>b</sup>	NS

<sup>a</sup>Higher means are underlined.

<sup>b</sup>The level of significance was set at .025 where variances were not homogeneous.



section of the Survey of Contributions to Teaching, respondents provided information regarding the position they held during the 1970-71 school year. This information was utilized in an analysis of variance involving the four subgroups, "Teacher," "Consultant," "Counsellor," and "Administrator."

1. Findings. Table 18 reveals that out of a comparison involving ten attitude measures and four teacher success ratios, only one attitude measure had significant mean differences; the administrator subgroup mean of 57.5 on the aspiration "Certainty of Attainment" was significantly higher, at the .01 level of confidence, than the means of any of the other subgroups.

2. Discussion. As this comparison resulted in a difference between subgroups on only one variable, the Certainty of Attainment Aspiration Scale, it appears that teaching position does not contribute to the relationships found between teacher attitudes and teacher success.

Main subject area of assignment. The Survey of Contributions to Teaching also solicited information regarding the main subject area to which teachers were assigned during the 1970-71 school year. Respondents were given a choice of twenty possible responses, but for purposes of this analysis, related subject area categories were combined to permit a four-subgroup comparison. These four subgroups were labelled as follows: "Social Studies," "English-Fine Arts," "Mathematics-Science," and "Vocational Education."

1. Findings. As evident in the summary of the findings





Table 19

A Comparison of Attitude Means and Teacher Success Ratio Means for Teachers Classified According to Main Subject Area Assignment

	Means				F Ratio	Significance & Significantly Different Pairs
	A Social Studies (N=27)	B English- Fine Arts (N=21)	C Math- Science (N=53)	D Vocational Education (N=15)		
ATTITUDE MEASURES						
OPI Scales						
Thinking Introversion	41.1	41.0	35.2	37.7	3.62	.05 A-C, B-C
Social Introversion	21.3	20.9	21.7	19.3	.34	NS
Theoretical Orientation	19.7	16.7	20.5	16.8	3.93	.05 B-C
Estheticism	9.52	14.7	8.36	13.1	3.22	.001 A-B, A-D B-C, C-D
Aspiration Scales						
Short-Range Realistic	41.7	41.7	42.5	34.9	2.06	NS
Short-Range Idealistic	48.9	47.7	47.4	36.3	3.72 <sup>b</sup>	NS
Long-Range Realistic	48.8	43.7	45.8	38.8	1.65	NS
Long-Range Idealistic	55.3	53.9	52.4	44.9	1.73 <sup>b</sup>	NS
Certainty of Attainment	48.2	47.2	45.6	39.5	1.34 <sup>b</sup>	NS
EPAQ	75.2	71.6	71.8	75.4	2.72	NS
TEACHER SUCCESS RATIOS						
Overall Success	3.65	3.53	3.54	3.72	.95	NS
Presage	3.78	3.54	3.64	3.84	.96	NS
Process	3.58	3.50	3.54	3.76	.97	NS
Product	3.58	3.46	3.23	3.51	1.71 <sup>b</sup>	NS

<sup>a</sup>Higher means are underlined.

<sup>b</sup>The level of significance was set at .025 where variances were not homogeneous.



presented in Table 19, significant differences were obtained for Thinking Introversion, Theoretical Orientation and Estheticism. The Social Studies subgroup achieved a significantly higher mean than the Mathematics-Science subgroup on Thinking Introversion and the English-Fine Arts subgroup achieved a significantly higher mean than the Mathematics-Science subgroup on Thinking Introversion. For Theoretical Orientation, the Mathematics-Science subgroup had a significantly higher mean than the English-Fine Arts subgroup. For Estheticism the English-Fine Arts subgroup achieved a significantly higher mean than the Social Studies and Mathematics-Science subgroups and the Vocational Education group achieved a significantly higher mean than the Social Studies and Mathematics-Science subgroups. No significant differences were noted on Social Introversion, the five aspiration scales, the EPAQ, and the four teacher success ratios.

2. Discussion. Although significant differences in attitudes were noted among the subgroups on three OPI scales, these attitude differences were not accompanied by significant differences on teacher success ratios. Main subject area of assignment does not seem to affect the teacher attitude-teacher success relationships found in the present study.

Time of questionnaire return. A record was kept of date of questionnaire return; 123 were returned after the first mailing, 43 were returned after the first follow-up letter and 37 were returned after the second follow-up letter. This record permitted an additional analysis of variance to be made. The purpose of this analysis was to determine



Table 20

A Comparison of Attitude Means and Teacher Success Ratio Means for Teachers Classified According to Time Questionnaire Was Returned

	Means				
	A	B	C	F	Significance &
	First	First	Second	Ratio	Significantly
	Mailing	Follow-up	Follow-up		Different Pairs
	(N=123)	(N=43)	(N=37)		
ATTITUDE MEASURES					
OPI Scales					
Thinking Introversion	38.3	35.5	<u>38.9</u>	2.04	NS
Social Introversion	20.9	<u>23.3</u>	19.2	2.34	NS
Theoretical Orientation	<u>19.3</u>	17.1	18.3	2.98	NS
Estheticism	10.9	10.8	<u>11.1</u>	.04	NS
Aspiration Scales					
Short-Range Realistic	40.6	37.4	<u>42.5</u>	2.80 <sup>b</sup>	NS
Short-Range Idealistic	44.5	43.7	<u>47.7</u>	1.02	NS
Long-Range Realistic	46.4	42.5	44.1	1.25	NS
Long-Range Idealistic	<u>52.5</u>	51.1	52.1	.14	NS
Certainty of Attainment	<u>46.0</u>	42.8	43.4	1.03	NS
EPAQ	<u>73.4</u>	71.8	71.9	1.38	NS
TEACHER SUCCESS RATIOS					
Overall Success	<u>3.68</u>	3.51	3.57	2.60	NS
Presage	<u>3.77</u>	3.60	3.65	1.67	NS
Process	<u>3.65</u>	3.50	3.61	1.49	NS
Product	<u>3.50</u>	3.15	3.33	3.56 <sup>b</sup>	NS

<sup>a</sup>Higher means are underlined.

<sup>b</sup>The level of significance was set at .025 where variances were not homogeneous.





what influence the time of questionnaire return had on the relationships that were found between teacher attitudes and teacher success.

1. Findings. The results of this analysis are as indicated in Table 20. Out of fourteen comparisons involving four OPI Scales, five Aspiration Scales, an Education Profession Attitude Questionnaire and four Teacher Success Ratios, no significant findings resulted among the "First Mailing," "First Follow-up," and "Second-Follow-up" subgroups.

2. Discussion. Significant relationships among the subgroups could not be found. Such a finding offers some support for the conclusion that time of questionnaire return did not contribute to the teacher success-teacher attitude relationships that were found in this study.

#### IV. SUMMARY

In this second data analysis chapter, findings related to the problem of determining whether there is a relationship between the attitudes prospective teachers possess at the completion of a four-year preparation program and their subsequent success as teachers, were presented and discussed. Low but statistically significant correlations were found between the following pairs of variables: .25 between Thinking Introversion and Overall Success, .15 between Thinking Introversion and Presage, .20 between Thinking Introversion and Process, .16 between Thinking Introversion and Product, .15 between Social Introversion and Presage, .20 between Theoretical Orientation and Overall Success, .15 between Theoretical Orientation and Presage, .17



between Certainty of Attainment and Overall Success and .15 between Certainty of Attainment and Presage. These findings offer some support for the conclusion that teacher attitudes are related to self-ratings of teaching success.

Further analysis was carried out by subdividing the sample on the basis of personal and professional variables. The purpose of this analysis was to determine what influence biographic variables have on the relationships found between teacher attitudes and teacher success. A sex comparison revealed that males had significantly higher attitude means on Theoretical Orientation and the five aspiration scales, and sex might have had some influence on significantly higher Overall Success and Presage ratios obtained by males. An elementary and secondary route comparison resulted in one significant finding, namely that the elementary group had a significantly higher Process ratio mean. One might also speculate that age appeared to influence teacher attitude-teacher success relationships; the oldest subgroup had significantly higher attitude means than the "19 to 21" and "22 to 25" subgroups on Thinking Introversion and Theoretical Orientation, and had significantly higher Overall Success and Process ratio means. When teachers were grouped according to the amount of university preparation, the subgroup with six years of training had a significantly higher Long-Range Realistic aspiration mean than the subgroup with four years of training, had a significantly higher Overall Success ratio mean than the "Four Years" and "Five Years" subgroups, and had a significantly higher Process ratio than the "Four Years" subgroup.

Other professional variables, namely, year of attendance at



Table 21

Summary of Significant Differences Between Biographic Subgroups and  
Teacher Attitudes and Teacher Success Ratios

	Personal Variables Sex Age	Professional Variables						Date Quest. Ret'd
		Year of Attend- ance	Route	Univer. Average	Amt. of Univer. Prep'n	Div.of Teach. Resp'y	Type of Subj. Pos'n Area Assign.	
ATTITUDE MEASURES								
OPI Scales								
Thinking Introversion	-	.01	-	.01	-	-	.05	-
Social Introversion	-	-	-	-	-	.01	-	-
Theoretical Orientation	.001	.05	.05	-	-	-	.05	-
Estheticism	.001	-	.05	-	-	-	.001	-
Aspiration Scales								
Short-Range Realistic	.001	.01	-	.001	-	.001	-	-
Short-Range Idealistic	.001	-	.05	.001	-	.01	-	-
Long-Range Realistic	.001	.05	-	.05	.01	.01	.01	-
Long-Range Idealistic	.001	-	-	.001	-	.01	.01	-
Certainty of Attainment	.001	-	-	.05	-	.01	.01	-
EPAQ								
	-	-	.001	-	-	-	-	-
TEACHER SUCCESS RATIOS								
Overall Success	.01	.01	-	-	.01	-	-	-
Presage	.01	-	-	-	-	-	-	-
Process	-	.01	-	.05	.01	-	-	-
Product	-	-	-	-	-	-	-	-





university, university average, division taught in, type of teaching position, main subject area of assignment, and time the questionnaire was returned, did not appear to influence the correlations found between teacher attitudes and teacher success. For these variables significant differences in attitudes did not occur along with significant differences in teacher success ratios.

A tabular summary of the discussion regarding personal and professional variable comparisons is presented in Table 21. This table shows that a number of significant differences in attitudes and teacher success ratios do occur when teachers are grouped by personal and professional variables. Possibly these personal and professional variable differences exerted some influence on the relationships found between teacher attitudes and teacher success.



## Chapter 6

### SUMMARY, CONCLUSIONS, AND IMPLICATIONS

This chapter presents an overview of the entire study. First, the study is briefly summarized. Second, a number of conclusions are drawn from the findings of the study. Third, implications are drawn and suggestions for further research in the area of teacher evaluation are presented.

#### I. SUMMARY OF THE STUDY

##### The Problem

The present study was concerned with three problems:

1. What factors do Alberta teachers perceive as being important to the teaching act in various subject-matter fields and grades?
2. What is the relationship between the attitudes prospective teachers possess at the completion of a four-year preparation program and their subsequent success as teachers?
3. What influence do biographic variables have on the relationship between teacher attitudes and teacher success?

##### Instruments

Data on teacher attitudes were gathered by means of the Education Student Attitude Inventory, which included ten scales: Thinking Introversion, a measure of interest in reflective thought and abstract ideas; Theoretical Orientation, a measure of interest in



scientific activities and methods; Estheticism, a measure of preference for varied artistic matters and activities; Social Introversion, a measure of interest in relating to other people; Education Profession Aspiration, a measure of a person's level of aspiration within the field of education; and Professional Attitude, a measure of agreement with policy of the teacher organization.

The teacher success data, like the teacher attitude data, were secured by means of respondent self-reports. The Survey of Contributions to Teaching requested that each respondent: (1) check those criteria which applied to his area of assignment this year, (2) rate those items which he felt were contributing to his area of assignment, and then (3) list and rate any additional factors which he felt were contributing to his teaching success.

### The Sample and Data Collection

Five attitude scales and five measures of aspiration had been utilized previously to collect attitude data, so that the study sample was restricted to those individuals who had filled out the Education Student Attitude Inventory while they were attending university in 1964 or 1968. Three further limitations were imposed on the selection of the study sample, namely:

1. The sample was limited to those individuals who proceeded directly through a four-year Bachelor of Education degree at the University of Alberta, or had entered the Bachelor of Education program after completing another degree.

2. It was further delimited to individuals who were enrolled





in the fourth year of a degree program in 1964-65 or 1967-68, or was in his first year of an after-degree program in 1964-65.

3. A final delimitation was one which restricted the sample to individuals who were involved in Alberta education on a full-time basis as teachers, administrators, consultants, and counsellors during the 1970-71 school year.

A total of 288 individuals met these requirements. The Survey of Contributions to Teaching was mailed to each of these individuals and 236 questionnaires were returned, a return of 82.9 per cent. Of these, 203 were usable in the present study.

#### Method of Data Analysis

Percentage comparisons were first made between the criteria of teaching success included in the Survey of Contributions to Teaching. The teacher success data were then utilized in a Pearson Product Moment comparison between teacher attitudes and teacher success. Further comparisons were made utilizing personal and professional variables; the Analysis of Variance was used in calculations involving comparisons of three or more subgroups, the  $t$  test was employed where two subgroups were being compared. For most analyses the .05 level of significance was used. In the case of comparisons involving the Scheffé test, the increased rigour seemed to justify a lower level of significance, hence the .10 level of significance for the Scheffé Comparison of Pairs of Means.



## Results

Self-rating of teaching success. Percentage comparisons revealed that teachers deemed process criteria to be the most important contributors to self-ratings of teaching success. The process criterion, "teacher-pupil relationship," was checked more frequently than any other factor on the scale. Product and presage criteria were deemed to be less important than process criteria by the Alberta teachers; "the professional activities of the teacher," a presage criterion, "examination results," a product criterion, and "the teacher's participation and standing in the community," a presage criterion, received identical ranks and were the least frequently checked of all criteria.

Respondents were given the opportunity to list additional criteria. Presage criteria were most frequently added to the Questionnaire, with process criteria following a close second.

Respondents also rated themselves on the criteria which they had checked, from which presage, product, and process ratios were calculated. The means for these ratios indicated that respondents: (1) rated themselves most highly on presage criteria, (2) rated themselves lower on process criteria, and (3) rated themselves lowest on product criteria.

A comparison of teaching attitudes and teaching success. When the Overall Success, Presage, Product, and Process ratios were compared to teacher attitude measures, low but statistically significant correlations were evident. Coefficients ranging from .15 to .25 were obtained. Thinking Introversion correlated positively with all four



teacher success ratios; Social Introversion correlated negatively with the Presage ratio; Theoretical Orientation correlated positively with the Overall Success and Presage ratios; and the aspiration scale of Certainty of Attainment correlated positively with the Overall Success and Presage ratios.

When data were analyzed by grouping according to personal and professional variables other findings emerged. The fact that males had significantly higher attitude means on Theoretical Orientation and the five aspiration scales appeared to be related to males having significantly higher Overall Success and Presage ratios. Elementary majors had a significantly higher Process ratio mean than their secondary counterparts. Age appeared to have some influence on relationships found between teacher attitudes and teaching success; the oldest subgroup displayed higher attitude means on Thinking Introversion and Theoretical Orientation, along with significantly higher Overall Success and Presage ratios. Amount of university training led to differences, namely that the subgroup with most years of training had a significantly higher Long-Range Realistic aspiration mean, and had significantly higher Overall Success and Process means. All of these findings were believed to be possible sources of influence on the teacher attitude-teacher success comparisons in this study.

Other subgroup comparisons were made, but few differences were found between the groups. Year of attendance at university, university average, division of main teaching responsibility, type of teaching position, main subject area of assignment, and date when the questionnaire was returned, were not believed to be possible sources of





influence on the relationships that were found between teacher attitudes and teacher success.

## II. CONCLUSIONS

The results of this study were utilized as a base for the following conclusions:

1. Teachers most frequently choose process criteria when giving self-reports of their teaching success.
2. On the average teachers rate themselves higher on presage criteria than they do on process and product criteria.
3. Prior held attitudes appear to be related to teaching success, when both attitudes and teaching success are measured by way of self-reports.
4. Males have a higher self-concept, and this may be partly related to the fact that males have higher aspirations, and are more apt to use the scientific method in their thinking (Theoretical Orientation).
5. Elementary majors rate themselves higher on process criteria.
6. Older individuals hold higher concepts of themselves as teachers than do younger individuals. Older individuals are characterized by a liking for reflective thought (Thinking Introversion), they seek social contacts (Social Introversion), and they show a preference for using the scientific method in thinking (Theoretical Orientation).
7. Increased university training appears to influence the self-concept of teaching success.



### III. IMPLICATIONS FOR ADMINISTRATION

The findings of the present study would seem to have several implications for administrators in education. In addition, there are a number of possible implications for teacher education institutions. The finding that teachers' attitudes help to explain and predict self-reports of teaching success suggests that there might be greater efforts made to shape attitudes of prospective teachers. Existing courses could be modified to make the preparation program more effective. More emphasis could be placed in developing Thinking Introversion or the interest in reflective thought and abstract ideas, and in developing Theoretical Orientation, or the interest in scientific activities and methods. These attitudes appear to be related to self-perception of teaching success.

A further implication is that planners of a teacher education program should decide on the emphasis to be accorded to the development of presage, process and product criteria, and then they should document the extent of this development in prospective teachers. For example, the study sample checked process criteria most often in their self-reports, and this may be an indication that the teacher education program has created an awareness of process in prospective teachers. But, at the same time means for the total sample indicated that the teachers did not tend to rate themselves highly on process factors, and this might be an indication that more work should be done in the development of the process skills. If process is indeed important, the fact that elementary majors had a significantly higher process mean than secondary majors, seems to indicate that the extra emphasis on



process criteria should be placed in the secondary route of the teacher education program. Both elementary and secondary majors tend to deemphasize product criteria, and this is yet another factor that should be taken into account when a teacher education program is being planned. Prospective teachers might become more familiar with process, product, and presage criteria, if present Alberta university programs in microteaching were expanded to include use of self-evaluation materials such as the questionnaire used in this study. If an awareness is created, it may influence teachers to improve their teaching.

There are also implications for central office administrators. Those who hire teachers should realize that: (1) older teachers tend to have a higher teaching success self-concept, (2) males tend to have a higher teaching success self-concept, and (3) teachers with more university training tend to have a higher teaching success self-concept. If employers deem a high self-concept to be desirable, they should keep the above findings in mind when they are hiring teachers.

School boards should be interested in matching the individual to the school in which he will be working. Findings of this study may help administrators in this regard. Applicants could be asked to fill out the Survey of Contributions to Teaching, and the rating of presage criteria might give the employer some idea of the personality of the individual being hired.

Superintendents might make use of the Survey of Contributions to Teaching in formal teacher evaluation. The teacher being evaluated could be requested to complete the Survey of Contributions to Teaching. This self-evaluation might then become part of a more complete written





evaluation of the teacher.

Individual teachers would stand to benefit from a self-evaluation instrument that could give them some indication of why they are successful as teachers. Teachers who are aware of their teaching strengths and weaknesses are apt to undertake improvements in instructional practices.

#### IV. FURTHER RESEARCH

Although the present study was the third study in a series of studies initiated by Ratsoy in 1965, the study of teacher attitudes and teacher success has only just begun. But a beginning has been made, and what are needed are further longitudinal studies to continue the work of the present study.

One study should be designed to compare supervisor ratings to the attitude data and teacher success data utilized in the present study. In order to keep the teacher success criteria uniform, it would be advisable to use the Survey of Contributions to Teaching that was utilized in the present study as the supervisor evaluation instrument. A further reason for suggesting that the Survey of Contributions to Teaching be utilized in supervisor evaluations is as follows: the Questionnaire uses a rating scale, and Smith (1971) in a recent review of research on teacher education indicates that the most promising results regarding process and product criteria have been obtained in studies in which the teacher was described using rating scales.

Smith also indicated that we have little knowledge of the relationship between teacher behavior and student growth. Another



follow-up study should be contemplated to determine what relationships exist between standardized student achievement measures, and teacher attitudes teacher self-ratings and supervisor ratings.

Methodology of the suggested research studies might be that of the present study modified to include a larger sample of teachers than were used in the present study. Perhaps more sophisticated techniques should be employed. For example, the Hierarchical Analysis suggested by McQuitty (1967) would permit a researcher to utilize the teacher attitude data, the teacher success data, and future supervisor and student achievement data for the purpose of classifying teachers into meaningful groups.



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## APPENDICES



## APPENDIX A

### COVERING LETTER AND FOLLOW-UP LETTERS





March 1, 1971

Dear Colleague:

This study is part of an extensive study of attitudes of prospective and practicing Alberta teachers begun in 1965. I am interested in gathering several types of data on teachers who were enrolled in the Faculty of Education at the University of Alberta in 1965 or 1968.

The present part of the study is concerned with self-reports of teaching success. An assumption underlying this survey is that every teacher makes some contributions to teaching which reflect his own strengths as an individual, and which may be unique to him. You are being asked in the attached questionnaire to give some indication of what you consider to be contributions you are making as a teacher.

All information will be coded and analyzed for groups of teachers, not individuals. Anonymity is assured.

I enclose a stamped addressed envelope for return of the questionnaire. Thank you for your cooperation in this project.







March, 1971

Dear Colleague,

About three weeks ago a questionnaire titled "Survey of Contributions to Teaching," was mailed to you. The information sought in the questionnaire forms an important part of a longitudinal study of the attitudes of prospective and practicing teachers.

At the time of writing this letter, a reply had not been received from you, so I am sending you this reminder and request that you complete the questionnaire and return it to me at your earliest convenience. If you have misplaced the questionnaire, or if it did not reach you, please let me know and a copy will be sent by return mail. Please be assured that the information will be treated confidentially and the data analyzed for groups of people not individuals.

If you have already returned the questionnaire, please ignore this request.

Thank you for your cooperation in this project.





April, 1971

Dear Colleague,

I note in my review of replies received that your copy of the "Survey of Contributions To Teaching," has not yet reached me.

Since the information sought forms an important part of a longitudinal study of attitudes of prospective and practicing teachers, I am particularly anxious that you complete the questionnaire. The one sent you may have been mislaid or perhaps it did not reach you. I am therefore enclosing a copy and also the covering letter which accompanied the first questionnaire.

Please complete the questionnaire and return it promptly so that the analyses of the results are not held up. Again I remind you that the analysis will be for groups of people not individuals. Anonymity will be assured.

I thank you in advance for your anticipated cooperation.



APPENDIX B

SURVEY OF CONTRIBUTIONS TO TEACHING





code . . . .

## SURVEY OF CONTRIBUTIONS TO TEACHING

There are TWO SECTIONS to this survey

### SECTION ONE. BACKGROUND INFORMATION

### SECTION TWO. SELF-REPORT ON FACTORS CONTRIBUTING TO TEACHING SUCCESS

#### BACKGROUND INFORMATION SECTION ONE

Section one of the survey requests descriptive information needed for classifying responses in the analysis.

1. Which of the following most nearly describes the position you hold in your school system this year? CHECK ONE:

1	Classroom teacher, giving all or nearly all of time to classroom teaching.	8	Vice-principal or assistant principal, teaching half time or more.	14	Supervisor, coordinator or consultant of a subject field, grade(s) or division(s) working in or from the district, division or county office.
2	Part-time, temporary, or substitute teacher.	9	Vice-principal or assistant principal, teaching less than half time or not teaching.	15	Counsellor or psychologist working in or from the district, division, or county office.
3	Department Head, grade coordinator or consultant assigned to one school.	10	Principal, teaching half time or more.	16	Coordinator or consultant of a subject field or grade(s) assigned to two or more schools (not working from the district, division or county office).
4	Counsellor, teaching half time or more.	11	Principal, teaching less than half time.	17	Superintendent.
5	Counsellor, teaching less than half time or not teaching.	12	Non teaching principal.	18	Assistant or deputy superintendent.
6	Librarian, teaching half time or more.	13	Director or coordinator of a special service (personnel, A/V materials, research, public relations, etc.) working in or from the district, division or county office.	19	Other.
7	Librarian, teaching less than half time or not teaching.				

2. In which DIVISION(S) does your MAIN responsibility this year lie? CHECK ONE:

1	Primary (K to III)	4	Senior High (X to XII)	7	Junior and Senior High
2	Intermediate (IV to VI)	5	Both Primary and Intermediate	8	Elementary, Jr. and Sr. High
3	Junior High (VII to IX)	6	Elementary and Junior High	9	Junior College

3. What is the EXTENT of your TOTAL ACADEMIC and PROFESSIONAL PREPARATION BEYOND HIGH SCHOOL? CHECK ONE:

1	Less than a 1-year program (7 mos.) in a Normal School, Teachers' College or University.	4	Three complete years but less than four in a University and/or Teachers' College.	6	Five complete years but less than six in a University and/or Teachers' College.
2	Standard 1-year program (7 mos. or more) in a Normal School, Teachers' College or University.	5	Four complete years but less than five in a University and/or Teachers' College.	7	Six or more complete years in a University and/or Teachers' College.
3	Two complete years but less than three in a University and/or Teachers' College.				



4. Which field are you mainly assigned to during the PRESENT SCHOOL YEAR? CHECK ONE:

1	Reading	6	Mathematics	11	Home Economics	16	Vocational Subjects (Other than Business)
2	Social Studies	7	Science	12	Libraries	17	Counselling-Psych.
3	English	8	Fine Arts	13	Industrial Arts	18	Administration
4	French	9	Physical Education	14	Business Education	19	Exceptional Children
5	Language (Other than French or English)	10	Teaching or supervising grades 1-2-3	15	Teaching or supervising grades 4-5-6	20	Other

5. What proportion of your teaching week is devoted to the field you have marked in question 4? CHECK ONE:

1	Less than 10%	2	From 10 to 24%	3	From 25 to 49%	4	From 50 to 74%	5	From 75 to 89%	6	90%-plus
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6. You may be assigned to more than one field this school year. Which is your SECOND FIELD OF CONCENTRATION? CHECK ONE:

1	Reading	6	Mathematics	11	Home Economics	16	Vocational Subjects (Other than Business)
2	Social Studies	7	Science	12	Libraries	17	Counselling-Psych.
3	English	8	Fine Arts	13	Industrial Arts	18	Administration
4	French	9	Physical Education	14	Business Education	19	Exceptional Children
5	Language (Other than English or French)	10	Teaching or supervising grades 4-5-6	15	Teaching or supervising grades 1-2-3	20	No second field of concentration
						21	Other

7. What proportion of your teaching week is devoted to the field you have marked in question 6? CHECK ONE:

1	Less than 10%	2	From 10 to 24%	3	From 25 to 49%
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# SELF-REPORT ON FACTORS CONTRIBUTING TO TEACHING SUCCESS SECTION TWO

This part of the survey has two purposes. One is to determine from a list of possible factors those which teachers perceive as being important to the teaching act in various subject-matter fields and grades. The other is to get an indication of each teacher's self-perception on the contribution he is making on the factors he checks and lists. Please feel free to add additional items and to comment on the items included.

Again, a reminder that data will be analyzed for groups not individuals. Anonymity is assured.

## Instructions:

1. You may feel some factors are important to teaching in the area of your assignment - other factors may in your opinion be unimportant. Please indicate which factors are important TO YOUR AREA OF ASSIGNMENT THIS YEAR by CHECKING in the appropriate space to the LEFT of the item.

2. FOR EACH ITEM that YOU have CHECKED, complete the section to the RIGHT of the item as follows:

Circle VERY HIGH if you consider YOUR CONTRIBUTION on the factor to be VERY HIGH this year (top 10% of all teachers).

Circle ABOVE AVERAGE if you consider YOUR CONTRIBUTION on the factor to be A LITTLE ABOVE AVERAGE this year (top 20% of all teachers).

Circle AVERAGE if you consider YOUR CONTRIBUTION on the factor to be AVERAGE this year.

Circle BELOW AVERAGE if you consider YOUR CONTRIBUTION on the factor to be A LITTLE BELOW AVERAGE this year.

Circle VERY LOW if you consider YOUR CONTRIBUTION on the factor to be VERY LOW this year.

3. Space has also been provided for you to list any additional factors which contribute to your teaching success.

CHECK ONLY ITEMS  
THAT ARE IMPORTANT  
TO YOUR TEACHING

YOUR CONTRIBUTION ON THE  
FACTORS YOU HAVE CHECKED

_____ 1. The energy, force and enthusiasm displayed in the teaching .....	Very High	Above Average	Average	Below Average	Very Low
_____ 2. Class control .....	Very High	Above Average	Average	Below Average	Very Low
_____ 3. Academic qualifications and knowledge of the curriculum .....	Very High	Above Average	Average	Below Average	Very Low
_____ 4. Pupil participation in lessons .....	Very High	Above Average	Average	Below Average	Very Low
_____ 5. The personality of the teacher .....	Very High	Above Average	Average	Below Average	Very Low





_____ 6.	Pupil attitudes of courtesy, industry, and self-reliance .....	Very High	Above Average	Average	Below Average	Very Low
_____ 7.	Lesson preparation and planning .....	Very High	Above Average	Average	Below Average	Very Low
_____ 8.	Concern with character development of the pupils .....	Very High	Above Average	Average	Below Average	Very Low
_____ 9.	The training of the pupils in self-expression	Very High	Above Average	Average	Below Average	Very Low
_____ 10.	The pupils work well without supervision ..	Very High	Above Average	Average	Below Average	Very Low
_____ 11.	Dress and appearance of the teacher .....	Very High	Above Average	Average	Below Average	Very Low
_____ 12.	The use of teaching aids .....	Very High	Above Average	Average	Below Average	Very Low
_____ 13.	Methods of lesson presentation used .....	Very High	Above Average	Average	Below Average	Very Low
_____ 14.	The training of pupils in civic competence and responsibility .....	Very High	Above Average	Average	Below Average	Very Low
_____ 15.	The professional activities of the teacher .....	Very High	Above Average	Average	Below Average	Very Low
_____ 16.	The pupils' appreciation of moral and ethical standards .....	Very High	Above Average	Average	Below Average	Very Low
_____ 17.	Examination results .....	Very High	Above Average	Average	Below Average	Very Low
_____ 18.	The teacher's participation and standing in the community .....	Very High	Above Average	Average	Below Average	Very Low
_____ 19.	The teacher's standing with the pupils .....	Very High	Above Average	Average	Below Average	Very Low
_____ 20.	Supervision and checking of written work ..	Very High	Above Average	Average	Below Average	Very Low
_____ 21.	The development of the process of individual enquiry in the pupils .....	Very High	Above Average	Average	Below Average	Very Low
_____ 22.	The attitude of the pupils to the school and authority .....	Very High	Above Average	Average	Below Average	Very Low
_____ 23.	The loyalty and dependability of the teacher .....	Very High	Above Average	Average	Below Average	Very Low
_____ 24.	The degree of cooperation of the teacher with other staff members .....	Very High	Above Average	Average	Below Average	Very Low
_____ 25.	Provision made for individual differences and group needs .....	Very High	Above Average	Average	Below Average	Very Low



_____ 26. Qualities of leadership displayed by the teacher .....	Very High	Above Average	Average	Below Average	Very Low
_____ 27. Concern with the all-round development of the pupils .....	Very High	Above Average	Average	Below Average	Very Low
_____ 28. Teacher-pupil relationship .....	Very High	Above Average	Average	Below Average	Very Low
_____ 29. The degree of self-evaluation of processes employed .....	Very High	Above Average	Average	Below Average	Very Low

Please list below any additional factor(s) that  
contribute to your teaching success.

30. _____	Very High	Above Average	Average	Below Average	Very Low
31. _____	Very High	Above Average	Average	Below Average	Very Low
32. _____	Very High	Above Average	Average	Below Average	Very Low
33. _____	Very High	Above Average	Average	Below Average	Very Low
34. _____	Very High	Above Average	Average	Below Average	Very Low

Please indicate if you are interested in receiving a summary when  
this study is completed. \_\_\_\_\_



APPENDIX C

EDUCATION STUDENT ATTITUDE INVENTORY



# Education Student Attitude Inventory



This inventory is part of a study designed to compare selected attitudes of several groups of Education students. Part A requests personal background information. Parts B and C are attitude questions. Part D requests information on your aspirations within the Education profession.

All information will be coded on IBM cards. Data will be processed for **groups** of students. Complete anonymity is assured. In order to secure a high percentage of returns, it will be necessary to later contact those not present when questionnaires were distributed. Your name is requested **only** for purposes of identifying these persons.

The questionnaire takes about 45 minutes to complete. Work rapidly. First impulses are important. Thank you for your co-operation.

## PART A

1. Name .....  
(surname) (given names)
2. Age - CHECK ONE:
  1. .... under 18
  2. .... 18 or 19
  3. .... 20 or 21 2
  4. .... 22 to 25
  5. .... over 25
3. Sex and Marital Status - CHECK ONE:
  1. .... Single male
  2. .... Single female
  3. .... Married male
  4. .... Married female 3
  5. .... Separated, divorced or widowed male
  6. .... Separated, divorced, or widowed female
4. Place of birth - CHECK ONE:
  1. .... Alberta
  2. .... Outside Alberta but in Canada 4
  3. .... Outside Canada
5. Completed Grade XII in - CHECK ONE:
  1. .... Edmonton
  2. .... Calgary
  3. .... Another Alberta City
  4. .... Alberta town
  5. .... Alberta village 5
  6. .... Alberta rural school
  7. .... City or Town outside Alberta
  8. .... Village or rural school outside Alberta
6. How many years have you attended university?  
CHECK ONE:
  1. .... Beginning my first
  2. .... Beginning my second
  3. .... Beginning my third 6
  4. .... Beginning my fourth
  5. .... Beginning my fifth
  6. .... More than five years
7. How many years have you spent in the Faculty of Education? - CHECK ONE:
  1. .... Beginning my first
  2. .... Beginning my second
  3. .... Beginning my third 7
  4. .... Beginning my fourth
  5. .... More than four years
8. What route are you in? - CHECK ONE:  
(If you are in your first year, check the route you will be in next year).
  1. .... Elementary
  2. .... Secondary 8
  3. .... Vocational
9. What is (or will be) your major field of concentration?  
CHECK ONE: (If you have more than one field, check the one you are most interested in.)
  1. .... English
  2. .... Foreign language
  3. .... Social Studies
  4. .... Mathematics
  5. .... Biological sciences
  6. .... Chemistry
  7. .... Physics 9,
  8. .... Fine Arts 10
  9. .... Physical Education
  10. .... Industrial Arts
  11. .... Home Economics
  12. .... Early childhood education
  13. .... Libraries
  14. .... Education of Exceptional children
  15. .... Other (specify)
10. How many university courses have you completed in your major field of concentration? CHECK ONE:
  1. .... None
  2. .... One course 11
  3. .... 2-3 courses
  4. .... 4-5 courses
  5. .... 6 or more courses





11. What grade level are you most interested in teaching?  
CHECK ONE:
1. .... Kindergarten
  2. .... Primary (1-3)
  3. .... Intermediate (4-6)
  4. .... Junior High (7-9) 12
  5. .... Senior High (10-12)
  6. .... Junior College
  7. .... University
  8. .... Other (specify) .....
12. What degree do you presently hold? CHECK ONE:
1. .... None
  2. .... B.A. (specify major): 13, .....
  3. .... B.Sc. (specify major) 14, .....
  4. .... Other (specify degree and major): 15 .....
13. How much teaching experience have you had?  
CHECK ONE:
1. .... None
  2. .... 1 year
  3. .... 2-4 years 16
  4. .... 5-7 years
  5. .... Over 7 years
14. Since high school, how many years have you spent away from school or university? (working, etc.)  
CHECK ONE:
1. .... None
  2. .... 1 year
  3. .... 2-4 years 17
  4. .... 5-7 years
  5. .... Over 7 years
15. While at university, do you live  
CHECK ONE:
1. .... With your parents? 18
  2. .... Away from your parents?
16. Your cumulative university average (or grade XII average if in your first year) is:  
CHECK ONE:
1. .... under 55
  2. .... 55-59
  3. .... 60-64
  4. .... 65-69
  5. .... 70-74 19
  6. .... 75-79
  7. .... 80-84
  8. .... 85 and over
17. The size of your hometown is:  
CHECK ONE:
1. .... Less than 1,000
  2. .... 1,000 - 5,000
  3. .... 5,000 - 25,000 20
  4. .... 25,000 - 200,000
  5. .... Over 200,000
18. Compared with your parents' socio-economic status, do you consider that your own socio-economic status as a teacher will be:  
CHECK ONE:
1. .... Considerably lower
  2. .... Somewhat lower
  3. .... Same 21
  4. .... Somewhat higher
  5. .... Considerably higher
19. Compared with the families of other university students, do you consider the socio-economic level of your family to be:  
CHECK ONE:
1. .... Considerably lower
  2. .... Somewhat lower
  3. .... Same 22
  4. .... Somewhat higher
  5. .... Considerably higher
20. The people you will associate with when a teacher will have:  
CHECK ONE:
1. .... Considerably less education than your parents
  2. .... Somewhat less education than your parents
  3. .... About the same level of education as your parents 23
  4. .... Somewhat more education than your parents
  5. .... Considerably more education than your parents
21. The persons you presently associate with most (i.e., your friends) are mainly:  
CHECK ONE:
1. .... Education students in the same major as you are in
  2. .... Education students but in another major
  3. .... Other university students 24
  4. .... Other Edmontonians
  5. .... People from your home town (other than Edmonton)
22. How much university training do you REALISTICALLY plan on having before you take your first teaching position? (If you have already taught, check the number you had before taking your first position.)  
CHECK ONE:
1. .... 1 year
  2. .... 2 years
  3. .... 3 years 25
  4. .... 4 years
  5. .... 5 years
  6. .... More than 5 years



## PART B

### ATTITUDE INVENTORY I

INSTRUCTIONS: READ CAREFULLY

26, 27 .....

28, 29 .....

30, 31 .....

32, 33 .....

This is not an ability or achievement test, but a means of reporting your attitudes, opinions, and feelings regarding a variety of subjects. There are no correct or incorrect answers.

Read each of the numbered statements and decide whether it is **true as applied to you** or **false as applied to you**. Although your response to each statement is important, your scores will be based on your answers to **groups** of statements.

It is not uncommon for persons taking an inventory of this type to be concerned about having to give simple **true** or **false** answers to the statements. Nevertheless, when **true**, for example, seems to be an inadequate response, you are still asked to circle **true** if the statement is **usually** true for you or more true than false.

Thus, if a statement is TRUE, or MOSTLY TRUE for you, **circle T**. If a statement is FALSE, or NOT USUALLY TRUE for you, **circle F**.

Circle Either T or F				
1. I prefer to engage in activities from which I can see definite results rather than those from which no tangible or objective results are apparent .....	T	F	12. I disagree with statements and ideas expressed by my classmates .....	T F
2. I analyze what I like or dislike about a movie or play which I have seen .....	T	F	13. I like to read serious, philosophical poetry ....	T F
3. I enjoy reading essays on serious or philosophical subjects .....	T	F	14. I like to write my reactions to and criticisms of a given philosophy or point of view .....	T F /15
4. I like to discuss the values of life, such as what makes an act good or evil .....	T	F /5	15. I enjoy solving problems of the type found in geometry, philosophy, or logic .....	T F
5. I give more attention to the action of the story than to the characterizations or to the form and style of the literature I read .....	T	F	16. I like modern art .....	T F
6. I am more realistic than idealistic, that is, more occupied with things as they are than with things as they should be .....	T	F	17. When I go to strange cities I visit museums ....	T F
7. I enjoy listening to poetry .....	T	F	18. I enjoy spending leisure time in writing poetry, plays, stories, or essays .....	T F
8. I question statements and ideas expressed by my teachers .....	T	F	19. I like to listen to primitive music .....	T F /20
9. I like dramatics .....	T	F /10	20. I leave the radio tuned to a symphony concert rather than to a program of popular music ....	T F
10. Colored lights sometimes arouse feelings of excitement in me .....	T	F	21. I analyze the motives of others and compare their reactions with my own .....	T F
11. I dislike assignments requiring original research work .....	T	F	22. I like to do work which requires little study or thought after it is once learned .....	T F
			23. I show individuality and originality in my school work .....	T F
			24. My conversations with friends usually deal with such subjects as mutual acquaintances and social activities .....	T F /25
			25. I study and analyze my own motives and reactions .....	T F





26. I dislike being assigned to write a short story, play, essay or song	T	F	
27. I enjoy looking at paintings, sculpture, and architecture	T	F	
28. I would like to be an actor on the stage or in the movies	T	F	
29. I prefer popular music to classical music	T	F	/30
30. If I were a university professor and had the necessary ability, I would prefer to teach chemistry and physics rather than poetry	T	F	
31. The artist and professor are probably more important to society than the businessman and the manufacturer	T	F	
32. I am more sensitive than most people	T	F	
33. As a youngster I acquired a strong interest in intellectual and aesthetic matters	T	F	
34. I tend to make friends with men who are rather sensitive and artistic	T	F	/35
35. I have frequently found myself, when alone, pondering such abstract problems as free will, evil, etc.	T	F	
36. I enjoy hearing a great singer in an opera	T	F	
37. I have spent a lot of time listening to serious music	T	F	
38. I enjoy reading Shakespeare's plays	T	F	
39. Much of my life I've dreamed about having enough time to paint or sculpture	T	F	/40
40. I would like to enter a profession which requires much original thinking	T	F	
41. I like to discuss philosophical problems	T	F	
42. I would like to collect prints of paintings which I personally enjoy	T	F	
43. I am fascinated by the way sunlight changes the appearance of objects and scenes	T	F	
44. I think I feel more intensely than most people do	T	F	/45
45. Sometimes I find myself "studying" advertisements in order to discover something interesting in them	T	F	
46. I like to read about artistic or literary achievements	T	F	
47. I have at one time or another in my life tried my hand at writing poetry	T	F	
48. I am interested in the historical changes and developments in American jazz	T	F	
49. I like short, factual questions in an examination better than questions which require the organization and interpretation of a large body of material	T	F	/50
50. Courses in literature and poetry have been as satisfying to me as most other subjects	T	F	
51. It is highly unlikely that astrology will ever be able to explain anything	T	F	
52. I think I take primarily an aesthetic view of experience	T	F	
53. When travelling I am more interested in seeing the scenic or historical spots than in making new acquaintances	T	F	
54. I enjoy thinking of new examples to illustrate general rules and principles	T	F	/55
55. I am uninterested in discussions of the ideal society or Utopia	T	F	
56. I like to serve as a member of a committee in carrying out some activity or project	T	F	
57. I discuss the causes and possible solutions of social, political, economic, or international problems	T	F	
58. I prefer to stay at home rather than attend social affairs	T	F	/59
59. I prefer a long, rather involved problem to several shorter ones	T	F	/2
60. I have one or more dates each week	T	F	
61. I am cordial to strangers	T	F	
62. I am bored by people of my own age level	T	F	/5
63. I seldom chat with clerks when they are waiting on me	T	F	
64. I like to take the lead at social gatherings	T	F	
65. I react to new ideas which I hear or read about by analyzing them to see if they fit in with my own point of view	T	F	
66. I prefer to carry out an activity or job rather than to do the planning for it	T	F	
67. I am more interested in the application of principles and theories than in the critical consideration of them	T	F	/10
68. I have no desire to be with others and to know their interests and experiences	T	F	
69. I dislike test questions in which the information being tested is in a form different from that in which it was learned	T	F	
70. I do not like to act as host or hostess at parties	T	F	





71. I am unable to explain the reasons for my opinions and reactions .	T	F		94. I get stage fright when I have to appear before a group .	T	F	
72. I work better when I am not being observed by others	T	F	/15	95. I prefer to have a principle or theory explained to me rather than attempting to understand it on my own	T	F	
73. I usually enjoy parties	T	F		96. I never worry about being different from other people	T	F	
74. I read articles or books that deal with new theories and points of view within my field of interest	T	F		97. I do not enjoy eating meals by myself	T	F	/40
75. I often feel that the people I meet are not interested in me	T	F		98. I like assignments which require me to draw my own conclusions from some data or body of facts	T	F	
76. I would enjoy studying the causes of an important national or international event and writing a paper on these causes	T	F		99. I do not enjoy starting in at a new school or moving to a new community	T	F	
77. I have difficulty in imagining the reaction of a person of another period, race, or country, to a given situation or environment	T	F	/20	100. I much enjoy thinking about some problem which is a challenge to the experts	T	F	
78. I am active on the committees of school organizations	T	F		101. I hesitate to ask the co-operation of others in carrying out activities such as the arrangements for a party	T	F	
79. I like to solves puzzles	T	F		102. I am interested in conversations about people whether or not I am acquainted with them	T	F	/45
80. My free time is usually filled up by social demands	T	F		103. I do not avoid large gatherings of people	T	F	
81. I have the feeling of being detached and alone when I am in a group of people	T	F		104. I prefer to work with others rather than alone	T	F	
82. I enjoy the actual laboratory work more than the study of the textbook for a course	T	F	/25	105. I expect that ultimately mathematics will prove more important for mankind than theology	T	F	
83. I hesitate to ask the assistance of others	T	F		106. At an exposition I like to go where I can see scientific apparatus rather than new manufactured products	T	F	
84. I enjoy writing a critical discussion of a book or article	T	F		107. I prefer the practical man any time to the man of ideas	T	F	/50
85. I enjoy being in a crowd just to be with people	T	F		108. I find it difficult to carry on a light conversation with strangers	T	F	
86. I like work requiring considerable physical activity	T	F		109. I am tantalized by a question or problem until I can think through to an answer satisfactory to myself	T	F	
87. I am embarrassed when I arrive too early or too late at a social affair	T	F	/30	110. I like to imagine what is inside objects	T	F	
88. I do not like to appear on programs or to give oral reports in class	T	F		111. I am ill at ease with members of the opposite sex	T	F	
89. I am bored by discussions of what life will be like one hundred years from now	T	F		112. I work better when people praise me	T	F	/55
90. I would enjoy writing a paper explaining a theory and presenting the arguments for and against it	T	F		113. I am a better listener than a conversationalist	T	F	
91. I am slow to accept new acquaintances as friends	T	F		114. I want to know that something will really work before I am willing to take a chance on it	T	F	
92. I like to converse and get acquainted with my teachers outside of class	T	F	/35	115. I take an active part in group or class discussions	T	F	
93. I like to work crossword puzzles	T	F		116. I prefer movies which are biographical or historical to movies of the musical comedy type	T	F	/59



117.	The thinking which I do is largely limited to that which I must do in the course of my work	T	F	/2	138.	I find it difficult to give up ideas and opinions which I hold	T	F	
118.	I enjoy listening to debates and discussions on social, economic, or political problems	T	F		139.	I prefer social functions to which only a small group of intimate friends is invited	T	F	
119.	I generally attend the meetings of school or college organizations	T	F		140.	I really enjoy dances	T	F	/25
120.	I occasionally express appreciation personally to a lecturer, soloist, or other performer at a school or community program	T	F	/5	141.	After a class period I think about the ideas presented there	T	F	
121.	I prefer to eat in a small rather than a large restaurant or cafeteria	T	F		142.	The main object of scientific research should be the discovery of truth rather than its practical applications	T	F	
122.	I am more interested in learning facts than in relating them to my ideas and previous experiences	T	F		143.	Science has its place, but there are many important things that can never possibly be understood by the human mind	T	F	
123.	I do not introduce myself to strangers at a social gathering	T	F		144.	I prefer to work outdoors rather than indoors	T	F	
124.	I become so enthusiastic that my enthusiasm spreads to those around me	T	F		145.	If I encounter a person whom I have met previously, I begin a conversation with him	T	F	/30
125.	I avoid becoming engaged in conversation with my barber or beauty parlor operator	T	F	/10	146.	I enjoy teas and receptions	T	F	
126.	I would enjoy writing a paper on the possible long-term effects or outcomes of a significant research discovery	T	F		147.	I talk with strangers when I travel	T	F	
127.	When I work I prefer to be alone rather than to have others around me	T	F		148.	I enjoy watching football, basketball, or baseball games	T	F	
128.	I do not express my opinions freely	T	F		149.	I enjoy chatting and playing with children	T	F	
129.	I think about the values and meanings of a college education	T	F		150.	I don't care much for scientific or mathematical articles	T	F	/35
130.	I prefer to visit with one person rather than with a group of people	T	F	/15	151.	I dislike mathematics	T	F	
131.	I enjoy a thought-provoking lecture	T	F		152.	I like to read about science	T	F	
132.	I shy away from serving as the chairman of a committee	T	F		153.	I like to look for faulty reasoning in an argument	T	F	
133.	I am aroused by a speaker's description of unfortunate conditions in a locality or country	T	F		154.	It puzzles me why some people will so avidly read and discuss science fiction	T	F	
134.	I hesitate to borrow money or personal belongings from others	T	F		155.	I would rather read about the lives and works of men such as Alexander, Julius Caesar, and Charlemagne than about Aristotle, Socrates, and Kant	T	F	/40
135.	I dislike having others deliberate and hesitate before acting	T	F	/20	156.	When science contradicts religion it is because of scientific hypotheses that have not and cannot be tested	T	F	
136.	I question the accuracy of statements made in my textbooks or reference books	T	F		157.	It is hard for me to work intently on a scholarly problem for more than an hour or two at a stretch	T	F	
137.	In a group of people, new acquaintances or strangers pay little attention to me	T	F		158.	When I sit down to study it is hard to keep my mind on the material	T	F	
					159.	Science should have as much to say about moral values as religion does	T	F	
					160.	The idea of doing research does not appeal to me	T	F	/45





## PART C

### ATTITUDE INVENTORY II

DIRECTIONS: A number of controversial statements are given below. Indicate the degree of your personal agreement or disagreement with each statement by circling the appropriate number at the right.

CIRCLE 1—if you **agree strongly (AS)** with the statement.

CIRCLE 2—if you **agree somewhat (A)** with the statement.

CIRCLE 3—if you are **undecided (U)**.

CIRCLE 4—if you **disagree somewhat (D)** with the statement.

CIRCLE 5—if you **disagree strongly (DS)** with the statement.

	AS	A	U	D	DS	
1. Schools should be granted greater local autonomy in curriculum building	1	2	3	4	5	
2. Provincial teachers' associations should be able to discipline members for violating teacher ethics	1	2	3	4	5	/35
3. Curriculum guides issued by the Department of Education should specify methods to be used	1	2	3	4	5	
4. School boards should be elected specifically to manage and administer the schools of the area and should be fiscally independent of municipal authorities	1	2	3	4	5	
5. Increased federal aid for education should be provided	1	2	3	4	5	
6. The curriculum authority of the Department of Education should be limited to matters of course objectives and minimum content	1	2	3	4	5	
7. Provincial teachers' associations should be concerned with the competence of teachers	1	2	3	4	5	/40
8. Effective teaching can be done with more than twenty-five pupils per class	1	2	3	4	5	
9. The local teaching staff should be consulted at all stages of the planning and designing of school buildings	1	2	3	4	5	
10. Only those individuals who have teaching certificates should be appointed to the instructional staff of the Faculty of Education	1	2	3	4	5	
11. The Alberta Teachers' Association should do everything in its power to maintain the right to strike	1	2	3	4	5	
12. Teachers should accept as part of their responsibility the supervision of pupil deportment on school premises during noon intermission	1	2	3	4	5	/45
13. Selection of instructional methods should be a prerogative of teachers	1	2	3	4	5	
14. Teachers should be paid according to a provincial salary scale	1	2	3	4	5	
15. Provincial teachers' associations should have the right to recommend cancellation of a teacher's certificate	1	2	3	4	5	
16. Membership in the provincial teachers' association should be compulsory for all teachers	1	2	3	4	5	
17. Teachers should be paid on the basis of merit	1	2	3	4	5	/50
18. All teachers should be employed and paid by the provincial government	1	2	3	4	5	
19. Teachers should decide whether or not they participate in or sponsor any particular extracurricular activity	1	2	3	4	5	
20. Teachers should be compensated for time spent in curriculum writing	1	2	3	4	5	

Continue on to page 8



## PART D

### EDUCATION PROFESSION ASPIRATION SCALE

Of the **60** Educational positions listed below, select the **NUMBER** corresponding to the position that best answers each of the following questions and **write this number** in the blank provided. For convenience, the positions have been listed in eight categories.

- |     |   |     |        |
|-----|---|-----|--------|
| (a) | Which is the BEST position you are REALLY SURE YOU CAN GET when your schooling is over?   | (a) | 54, 55 |
| (b) | Which ONE would you choose if you were FREE TO CHOOSE ANY of them you wished when your schooling is over?                                     | (b) | 56, 57 |
| (c) | Which is the BEST ONE you are REALLY SURE YOU CAN HAVE ten years from now?  | (c) | 58, 59 |
| (d) | Which is the ONE you would choose to have ten years from now, if you were FREE TO HAVE ANY of them you wished?                                | (d) | 60, 61 |
| (e) | Which is the BEST ONE you are CERTAIN you would be successful in, if you were given the opportunity of having it when YOUR SCHOOLING IS OVER? | (e) | 62, 63 |
- 

#### A. PRESCHOOL (nursery and kindergarten positions)

1. Teacher
2. Supervision of nursery schools
3. Research worker in child growth and development
4. Director of a private nursery or kindergarten

#### B. ELEMENTARY SCHOOL POSITIONS

5. Teacher for separate or combined grades in a small town
6. Teacher for separate or combined grades in a city
7. Teacher of special subjects such as art, music, or physical education
8. Teacher of physically handicapped or mentally retarded
9. Co-operating teacher in a demonstration school
10. General or special supervisor
11. Assistant principal in a small town school
12. Assistant principal in a city
13. Principal, small town school
14. Principal, city school
15. Librarian
16. Child psychologist or counselor
17. Curriculum consultant

#### C. SECONDARY SCHOOL POSITIONS (Junior and Senior High)

18. Teacher of academic subject, small town school
19. Teacher of vocational subject, small town school
20. Teacher of academic subject, city school
21. Teacher of vocational subject, city school
22. Co-operating teacher in a demonstration school
23. Department head of a subject area
24. Assistant principal, small town school
25. Assistant principal, city school
26. Principal, small town school
27. Principal, city school
28. Supervisor of a subject area
29. Curriculum consultant
30. Athletic coach
31. Guidance director
32. Librarian

#### D. ADMINISTRATIVE AND SPECIAL SERVICES

33. Superintendent of a city system
34. Assistant superintendent of a city system
35. Business manager (supplies, purchasing, etc.)
36. Research director
37. Director of audio-visual materials, city school system
38. Director of public relations, city school system
39. School psychologist, city school system
40. Personnel director, city school system

#### E. JUNIOR COLLEGE POSITIONS

41. Teacher of subject field
42. Personnel director
43. President or dean
44. Registrar
45. Business manager

#### F. UNIVERSITY POSITIONS

46. Lecturer in any subject field offered in the Faculty of Education
47. Professor in a subject field in the Faculty of Education
48. Head of a department in the Faculty of Education
49. Assistant dean of Education
50. Dean of Education
51. President of a university

#### G. PROFESSIONAL ORGANIZATIONS (such as the Alberta Teachers' Association or the Canadian Teachers' Federation)

52. Staff office or field worker
53. Executive secretary
54. Research worker

#### H. PROVINCIAL DEPARTMENT OF EDUCATION

55. Superintendent of a school division or county
  56. Inspector of high schools
  57. Director of a Division within the Department (e.g., Director of Vocational Education)
  58. Director of a Branch within a Departmental Division (e.g., Director of Guidance, Director of Curriculum)
  59. Chief superintendent of schools
  60. Deputy Minister of Education
- 

Your co-operation in completing this inventory is much appreciated.

Completeness in answering all items is important. Would you please check to see that a response has been made to all items.

You are reminded that all answers given here are held in strict confidence and that after coding, all replies become completely anonymous and are used thereafter only for statistical analysis.

THANK YOU.













**B29992**